EXPLORATION OF PATIENTS' SPIRITUAL/RELIGIOUS BELIEFS AND RESUSCITATION DECISIONS

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF
THE UNIVERSITY OF HAWAIʻI AT MĀNOA
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPY

IN

NURSING

DECEMBER 2016

By

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Keywords: spiritual beliefs, religious beliefs, patient, resuscitation

Acknowledgement

I would like to express my deepest appreciation to my academic advisor and dissertation committee chairperson, Dr. Sandra A. LeVasseur, for her support and encouragement over the past five and a half years. She would listen, coach, and encourage me to meet my milestones.

I would also like to thank my committee members Dr. Merle R. Kataoka-Yahiro, Dr. Alice Tse, Dr. Guangxiang Zhang, and Dr. Elizabeth Tam for freely sharing their insights and expertise, and for their contributions to my writing. To my friend and manuscript editor Deb Smith, who has been reviewing, suggesting, and learning statistics and the scholarly writing process so I may accomplish this final part of my dissertation: I truly would not have been able to accomplish this without you.

To my family, Jeff, Mari, and Anna, who were in the trenches with me, were patient and were quiet when I needed to be online or writing late into the night: my love, gratitude, and wishes for lots of joy and blessings.

To my Queen's coworkers on the Pain and Palliative Team who let me be flexible in my hours and time off, to the nurses who assisted me in recruiting and consenting, to the IRB reviewers, and to the patients who shared their time and stories with me, thank you.

Abstract

The resuscitation decision, which has the potential to reverse a premature death or prolong the dying process, is complex and can be associated with spiritual/religious beliefs, values, and quality of life. The consequences of the resuscitation decision make it imperative that healthcare providers have an understanding of patients' spiritual/religious beliefs and how those beliefs are associated with their resuscitation decisions. The objective of this study was to determine the associations between hospitalized patients' spiritual/religious beliefs and their resuscitation decisions.

A single-site, descriptive, correlational study was conducted with a convenience sample of 84 hospitalized patients who were enrolled between November 20, 2015 and January 16, 2016. The Spiritual Involvement and Beliefs Scale-Revised (SIBS-R) and Beliefs and Values Scale (BVS) were used to assess spiritual/religious beliefs. Two questions (If your heart were to stop would you want someone to try to restart it? If you were to stop breathing would you want a breathing tube and machine?) were used to determine resuscitation decision.

No associations were found between the demographic characteristics of this patient population and their resuscitation decisions. However, participants' SIBS-R Total and External/Ritual scores and BVS Total and Factor 1 scores varied significantly according to primary spiritual/religious beliefs (traditional theistic and non-theistic) and ethnicity (Asian, Caucasian, and Native Hawai‘ian/Pacific Islanders).

This study found no associations between resuscitation decisions and spiritual/religious beliefs in the sample of hospitalized patients, thus in the clinical setting assumptions about spiritual/religious beliefs and resuscitation decisions should not be made. Further research should

address the complexity of the resuscitation decision, including individual factors such as patient understanding of medical interventions and anticipated prognosis, and influencing factors regarding cultural collectivist decision-making and acculturation.

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List of Abbreviations

AOR..... Adjusted Odds Ratio
BVS ..... Beliefs and Values Scale
CI ..... Confidence Interval
DNAR..... Do Not Attempt Resuscitation
DNR ..... Do Not Resuscitate
MoCA..... Montreal Cognitive Assessment
MHT ..... Multidisciplinary Healthcare Team
SD..... Standard Deviation
SIBS ..... Spiritual Involvement and Beliefs Scale
SIBS-R..... Spiritual Involvement and Beliefs Scale-Revised
OR ..... Odds Ratio
PUM ..... Pragmatic Utility Method
QoL ..... Quality of Life
QMC..... The Queen's Medical Center-Punchbowl

Chapter 1. Introduction

Problem

Spiritual/religious care is a complicated but integral part of nursing care (Barnum, 2006; Marco & Larkin, 2008). Research shows that patients describe an improved quality of life (QoL) and an increased overall satisfaction with the healthcare experience when their spiritual needs have been met (Clark, Drain, & Malone, 2003; Koenig, 2011; Voogt et al., 2005; Williams, Meltzer, Arora, Chung, & Curlin, 2011; Winzelberg, Hanson, & Tulsky, 2005). Although definitions of spirituality are inconsistent (Burkhart & Hogan 2008, Hermann 2001), healthcare interventions with a spiritual/religious component still appear to have a positive influence on patients' QoL (Candy et al., 2012, Salsman et al., 2015).

Studies indicate that at end-of-life, specific patient decisions (such as the selection of aggressive life-supportive care) are associated with spiritual beliefs (Phelps et al., 2009; Sharp, Carr, & Macdonald, 2012). A patient's resuscitation decision, which has the potential to reverse a premature death or prolong the dying process (Santonocito, Ristagno, Gullo, & Weil, 2013), is complex—it can be associated with spiritual/religious beliefs (Phelps et al., 2009; Sharp et al., 2012), values (Leichtentritt & Rettig, 2001), and quality of life (Kelley, Wenger, & Sarkisian, 2010), and involve not only patients (Barry & Henderson, 1996; Blanchard, Labrecque, Ruckdeschel, & Blanchard, 1988; Voogt et al., 2005; Winzelberg et al., 2005), but also their families (Horne, Seymour, & Payne, 2012; Jaul, Zabari, & Brodsky, 2014; Ko, Nelson-Becker, Park, & Shin, 2013; Krishna et al., 2014; Mazanec, Daly, & Townsend, 2010; Mead et al., 2013), and their healthcare providers (Mead et al., 2013; Rodriguez & Young, 2005).

Significance of the Problem

Arguably, there is no more significant healthcare decision than the resuscitation decision. End-of-life is a highly emotional time for patients and families, and there may be a plethora of healthcare options to consider. In addition, ongoing aggressive life-supportive treatment may be a financial burden to patients, families, and healthcare systems, making it imperative to discuss and make prudent end-of-life or resuscitation decisions (Celso & Meenrajan, 2010).

A part of holistic nursing care is to assist patients in their end-of-life or resuscitation decision-making. Considering the apparent role of spiritual care in patient satisfaction and QoL, the paucity of studies examining associations between spiritual/religious beliefs and resuscitation decisions in patient populations exemplifies the need for this research (Selman et al., 2011).

Background

Healthcare decision-making theory. Patients have a variety of healthcare decisions to make, ranging from treatment decisions to compliance with lifestyle changes to end-of-life decisions that include resuscitation or the treatment of pain (Quill, 2000). Historically, healthcare decision-making was paternalistic, with the physician making the decisions. Since the 1980s, healthcare decision-making has been progressing to a collaborative patient-and-physician decision-making practice (Charles, Gafni, & Whelan, 1997; Charles, Whelan, & Gafni, 1999). Llewellyn-Thomas (1995) illustrates the complexity of modern healthcare decision-making with a comprehensive framework that incorporates health states, treatment processes, time periods, participation, information, expectations, and preferences in the context of patients, families, and healthcare providers all making decisions (Figure 1).

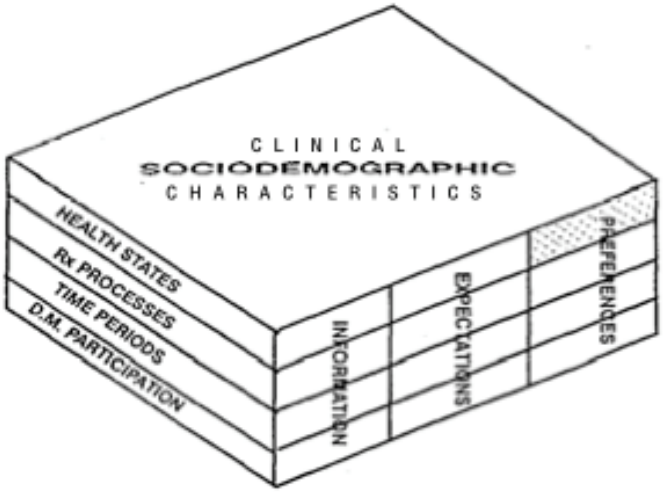


Figure 1. Healthcare Decision-Making (Llewellyn-Thomas, 1995)

Patients' spiritual/religious beliefs. Patients describe *spirituality* from a religious perspective as relating to God or religion (Egan et al., 2011; Hermann, 2001; Koffman, Morgan, Edmonds, Speck, & Higginson, 2008; McGrath, 2003; Mok, Wong, & Wong, 2010; Penman, Oliver, & Harrington, 2009). They do not see spirituality as separate from self or the core of being (Egan et al., 2011; Mok et al., 2010), and it is often described as relationships between others (Koffman et al., 2008; Penman et al., 2009), nature (Chao, Chen, & Yen, 2002), and higher power (Hermann, 2001; Mok, et al., 2010; Penman, et al., 2009). Spirituality may include the process of seeking a meaning or purpose in relationships (Stephenson, Draucker, & Martsolf, 2003), or a wholeness of spirit (McGrath, 2003; Mok et al., 2010; Stephenson et al., 2003). Patients' definitions of spirituality are highly personal, often borrowing from different religious/spiritual ideas for their own unique beliefs (Bregman, 2006; Egan et al., 2011; McGrath, 2003).

Patients expect nurses to care for them in a spiritual manner (Taylor, 2003). Several

predictors of patients' spiritual beliefs and attitudes have been identified as female gender, old age, more years of education, and worse performance status (Mystakidou et al., 2008). Spiritual and religious beliefs appear to be more important to patients at end-of-life (Brady, Peterman, Fitchett, Mo, & Cella, 1999; Egan et al., 2011; Phelps et al., 2012; Sulmasy, 2002).

Patient spirituality theory. Spirituality, as a concept, is evolving in the nursing profession. The first nurses in recorded history were trained and practiced from a religious foundation (Bradshaw, 1999). In the 19th century, Florence Nightingale observed a distinction by describing the concept of spirituality as "the experience of our unity with the divine power and the consciousness that underlies the created world," and religion as a system of beliefs and practices (Macrae, 2001, p.22). In the 1950s, the nursing profession began to focus on a biomedical model and turn away from the religious model, though until the 1980s the concept of religion was more commonly used in healthcare to describe beliefs, while spirituality is the term most commonly used today (Bregman, 2006).

The biopsychosocial-spiritual model of care (Puchalski et al., 2009) provides healthcare professionals an established standard for palliative care inclusive of spirituality. Nurses, however, continue to have difficulty in assessing and measuring patients' spiritual outcomes and, as a result, frequently prioritize the physical care of patients, leaving little or no time for spiritual care. Spiritual care by nurses is further hampered by the perspective of the multidisciplinary team and healthcare organization overall, which is often focused on economics—spiritual care is not a reimbursable service (Burkhart & Hogan 2008).

Spiritual/religious beliefs assessment. Because the definition of spirituality differs from patient to patient, clarifying each patient's understanding of spirituality is essential in order to

incorporate it into his or her healthcare (Burkhart & Hogan, 2008; Hermann, 2001). The use of a *spiritual assessment* helps to guide the nurse in this process.

There are two fundamental methods used to assess patient spiritual/religious beliefs: qualitative and quantitative. Staff nurses often use open-ended spiritual questions (qualitative) during triage or admission interviews to contribute to the comprehensiveness of the patient's plan for care concerning spiritual needs (King & Koenig, 2009; Puchalski et al., 2009). In nursing research, however, quantitative scales are typically used to establish the population-based perspective, though there are concerns regarding existing spiritual/religious research. First, research measuring spiritual/religious beliefs has been conducted primarily with Caucasian and Christian sample populations (Koenig, 2011). Approximately 80% of the population of United States claims affiliation with Judeo-Christian beliefs, leaving 20% of the population not accounted for in these studies.

Consider the State of Hawai‘i:

> ... 41% of the state population identifies as religious ... Out of the 41%, about 18% identify as members of the Catholic Church, making it the largest denomination in Hawaii [sic]. About 5% out of the 41% identify as members of the Church of Latter Day Saints, otherwise known as Mormonism. Also, 5% out of the 41% identify as members of some Eastern religion. All the other Christian denominations make up about 12.9% of the population. Those who identify as Jewish or Islamic only make up 0.1% of the population (Hawai‘i Population, 2013).

To date, no spiritual/religious assessment scale has been validated in an ethnically and spiritually diverse population of Hawai‘i. Spiritual assessment scales need to be generalized to the whole population and not be religion-specific in order to enhance population-based healthcare.

Summary

Research literature continues to demonstrate that spiritual/religious beliefs have

numerous definitions (Unruh, Versnel, & Kerr, 2002), yet today's healthcare environment calls for holistic nursing care that incorporates patient spiritual/religious beliefs. Such care may be critical in the context of assisting patients in making resuscitation decisions, which are complex, impact QoL, and may be mortal.

These consequences make it imperative that nurses have an understanding of patients' spiritual/religious beliefs and how those beliefs are associated with resuscitation decisions, yet there is little research to guide them. Further research is essential to explore and better understand the associations between patients' spiritual/religious beliefs and their resuscitation decisions. Thus, the purpose of this study is to examine associations between spiritual/religious beliefs and resuscitation decisions in hospitalized patients.

Chapter 2. Literature Review

Separate literature reviews were conducted to examine four questions: 1) How are spiritual/religious beliefs conceptualized by different professional perspectives? 2) How do patients describe spiritual/religious beliefs? 3) What associations exist among patients' (any patient context) spiritual/religious beliefs, quality of life, and resuscitation decisions? 4) What instruments are used to measure spiritual/religious beliefs in hospitalized patients?

Conceptualization of Spiritual/Religious Beliefs by Professionals

The initial literature search covered 1986 to 2011 using PubMed, CINAHL, and PsychINFO. The Pragmatic Utility Method (PUM) was used to explore how different professional fields describe the concept spirituality, using the keywords *spirituality*, *spiritual suffering, spiritual distress, spiritual assessment,* and *cultural diversity*. The four principles of the PUM (clarifying the purpose of the inquiry, reviewing the literature, identifying critical questions, and synthesizing the results) (Morse, 2000) were employed.

Spirituality has been described as both an *everyday concept* (one that is used broadly in many settings outside of healthcare) and a *scientific concept* (one that is assessed and measured by researchers) (Morse, 2000). The difficulty with the scientific definition of spirituality is the lack of agreement among researchers, as Bregman (2006) observed by identifying six themes from the 93 definitions of spirituality in healthcare literature described by Unruh, Versnel & Kerr (2002).

After abstract review, 85 articles and three books (Barnum, 2006; Koenig, 2011; O'Brien, 2014) met the criteria (English language and subject: professionals) for further review. Local chaplains gave their opinions on recognized local, national, and international leaders in the

concept of spirituality (C.Liu, personal communication, September 2011; W. Love, personal communication, September 2011). The review of the literature revealed descriptions of spirituality that differed according to the respective perspectives of multidisciplinary healthcare teams, nurses, and theologians.

Multidisciplinary healthcare teams (MHT). Puchalski et al. (2009) described the Consensus Conference, at which a gathering of multidisciplinary healthcare professionals and recognized community leaders developed recommendations to advance the delivery of quality spiritual care as a dimension of palliative care. A later report by Puchalski, Vitillo, Hull, & Reller (2014) noted that the Consensus Conference incorporated an international perspective and defined spirituality as "a dynamic and intrinsic aspect of humanity through which persons seek ultimate meaning, purpose, and transcendence, and experience relationship to self, family, others, community, society, nature, and the significant or scared. Spirituality is expressed through beliefs, values, traditions, and practices (p. 646)." This definition might be represented as shown in Figure 2.

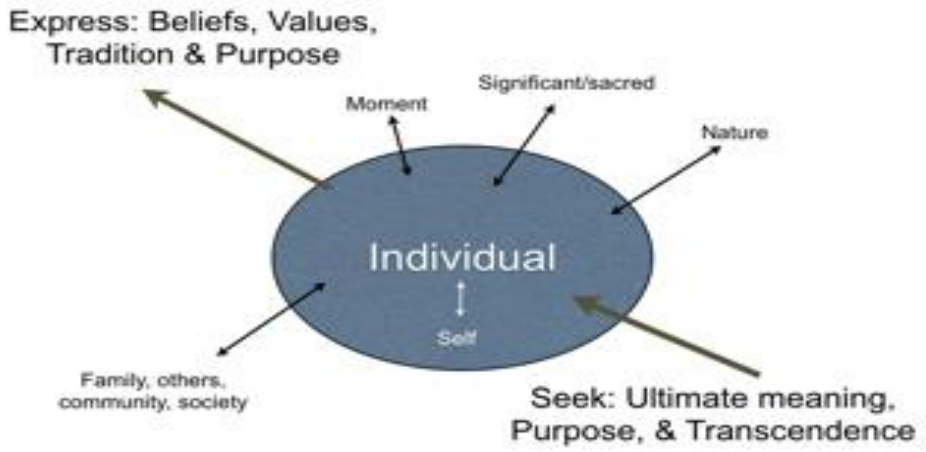


Figure 2. MHT Definition of Spirituality (Puchalski et al., 2014)

From a healthcare professional perspective, spirituality is defined differently from religion because religion is often defined as a faith-based practice founded upon rules and rituals (Balboni et al., 2010; Emblen, 1992). Koenig (2011) also differentiated religion from spirituality and noted that spiritual research, from a definition perspective, is difficult.

Nurses. Patient spirituality as described from a nursing perspective has evolved through history. For example, Watson's (1985) spirituality theory is described as a framework of mind, body, and soul with a goal of achieving harmony among the parts while striving to be "Godlike." Dossey's (1989) "path toward spirituality" is based on a biopsychosocial-spiritual framework wherein the spiritual goal is healing and evolving, and Newman's (1994) theory on "evolving consciousness" focuses on the continuing expansion of consciousness as the life goal.

Miner-Williams (2006) developed a theoretical framework of patient spirituality based on five concepts: connectedness, meaning, transcendence, values and beliefs, and energy and emotions. A patient's spirituality within the framework is defined as the individual's quest for

meaning, purpose and/or happiness while seeking health or the alleviation of suffering. Included in the framework are the individual's values and beliefs, how those values and beliefs are manifested in relationships and behaviors, and the emotions that may be manifested in search of health or the alleviation of suffering. Other components are the search for meaning, purpose, and happiness, and the energy required to engage in the search.

Theologians. Spirituality and healthcare from a theological perspective relates to the meaning and purpose of one's life (Hermann 2001) versus more concrete definitions related to relationships, caring, and connectedness (O'Brien, 1999). From the framework of spiritual needs, Bartel (2004) described a spirituality continuum based on five spiritual needs: love, faith, hope, virtue, and beauty. Individuals may be situated at different points on the continuum based on their spiritual needs.

Bregman (2006) suggests that religion has historically included descriptions of the individual's inner and personal capacity. Figure 3 depicts the concept of secularization, or a personal religion where one mixes and matches different religious beliefs and cultural practices based on one's needs (Bregman, 2006; Bartel, 2004).

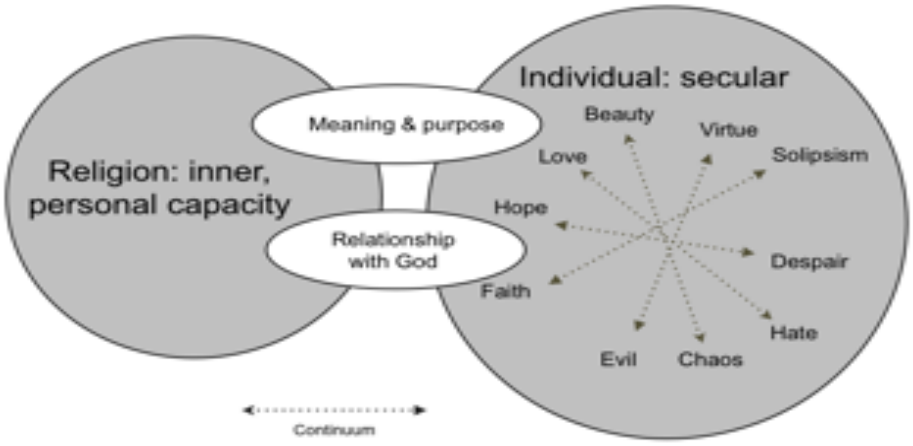


Figure 3. Theologian Definition of Spirituality (Bregman, 2006; Bartel, 2004)

A summary of the descriptions of spirituality found in the literature search are shown in Table 1. All models included connections or relationships with higher power. The MHT and nursing models described connections with nature, self, and others. The nursing model included reference to emotions (Miner-Williams, 2006).

Table 1.

Descriptions of Religion and Spirituality by Profession

Profession	**Religion**	**Spirituality**
Healthcare professionals	Belief systems, worship practices	Inner personal capacity and expression of beliefs
Nurses	Belief systems, worship practices	Belief systems, emotions, relational and behavioral practices
Theologians	Inner personal capacity	Secularism: “personal religion”

Description of Spiritual/Religious Beliefs by Patients

The literature review explored how patients describe spiritual/religious beliefs in comparison to the professional perspectives of multidisciplinary healthcare teams, nurses, and theologians. The PUM was employed and the review was conducted using "University All Sites Search," a library search engine that examines all physical and digital items owned or subscribed to by the library including, for example, ATLA Religion Database, CINAHL, PubMed, and ProQuest Dissertation and Thesis. The literature search terms utilized were spirituality, religion, qualitative, palliative, end-of-life, and patient. The date range for this search was 2010 to 2015, with additional articles reviewed from references.

Table 2.

Literature Search

University All Sites	**Key Terms**	**#Articles**
One Search	**Spirituality**: English and peer-reviewed	13,681
	AND **qualitative**, after 2010	1,588
	AND **patients**	201
	AND **end-of-life/palliative**	94
	Reviewed titles, abstracts and fit criteria	77
References		3
Total		80

The literature search resulted in 80 articles. The titles and abstracts of each article were reviewed. Articles that discussed studies in which the health status of the patient was not palliative or the health status could not be determined were excluded from review (*n*=20). Additional articles excluded discussed quantitative studies (*n*=12), case studies (*n*=3), or studies in which the responses of family members or healthcare professionals were reported jointly with the responses of patients (*n*=22). Articles including concept analyses (*n*=1), literature reviews (*n*=2), and those lacking enough data to determine theoretical model (*n*=2) were also excluded. The remaining 18 articles describing the palliative patient's spiritual/religious beliefs from the multidisciplinary healthcare team, nurse, and theologian perspectives were reviewed.

The qualitative studies identified to explore spiritual/religious beliefs represented the views of 456 palliative patients from diverse backgrounds in the United States, Japan, Taiwan, Australia, Great Britain, United Kingdom, Hong Kong, New Zealand, and Norway. Participants represented several ethnic backgrounds. However, most reported having Christian religious/spiritual beliefs (Alcorn et al., 2010; Chao et al., 2002; Egan et al., 2011; Hanson et al., 2008; Hermann, 2001; Koffman et al., 2008; Mako, Galek, & Poppito, 2006; McGrath, 2003; Mok et al., 2010; Norum, Risberg, & Solberg, 2000; Penman et al., 2009; Woods &Ironson, 1999). The patients described various definitions of spirituality, ranging from never thinking about it (Egan et al., 2011; Hermann, 2001; Koffman et al., 2008) to including it with religion (Egan et al., 2011; Hermann, 2001; Koffman et al., 2008; McGrath, 2003; Mok et al., 2010; Penman et al., 2009; Stephenson et al., 2003) to, most commonly, a definition similar to the Miner-Williams framework that describes spiritual/religious beliefs according to nurses (Alcorn et al., 2010; Chao et al., 2002; Egan et al., 2011; Hall, 1998; Hanson et al., 2008; Mako et al.,

2006; McGrath, 2003; Mok et al., 2010; Murray et al., 2007; Penman et al., 2009; Woods & Ironson 1999) (Appendix A).

The review indicated no two groups of palliative patients were fully in agreement in their definitions of spiritual/religious beliefs and supported the notion that the concept of spirituality has numerous descriptions and definitions (Unruh et al., 2002). Further analysis did indicate that the MHT and nursing models of spiritual/religious beliefs appear to be more closely aligned with patients' perspectives than the theological model (Bregman, 2006; Bartel, 2004). The nursing model (Miner-Williams, 2006) appears to align with most patient descriptions of spirituality. These trends were consistent across diverse spiritual/religious participants (Chao et al., 2002; Kociszewski, 2004; Mok et al., 2010; Noble & Jones 2010) and over the 5-year time span of the literature reviewed.

Associations Between Spiritual/Religious Beliefs and Resuscitation Decisions

The purpose of this segment of the literature review was to explore the factors that affect resuscitation decisions, especially spiritual/religious beliefs and quality of life. The key search terms were decision-making, control preferences, self-efficacy, code status, resuscitation, patient, spirit/spiritual, and religious. The studies retrieved were limited to research articles written in English and the results of the search engines used [University Search Engine, e.g., CINAHL, PubMed, ProQuest, ATLA, HaPI, Psych Info (1970-2015), Gray Literature (-2015), and Google Scholar (1990-2015)]. A hand search of the references (of review articles and articles using spiritual/religious scales) was also completed.

After duplicates were removed, the title and abstract for each article was read, and an initial round of exclusion criteria was applied (article not written in English, research sample

comprised of children or students, or research topic of literature, movies, education, addiction, or burnout). The remaining articles were read in full, followed by the application of a second round of exclusion criteria (research sample comprised of families). Review articles were read and reviewed in search of any primary articles not identified during the initial literature search. Articles reporting on either qualitatively or quantitatively derived findings were included. After a unique set of articles was identified, a quality review of the articles was conducted using the PRISMA 2009 Checklist (Moher, Liberati, Tetzlaff, Altman, & Group, 2009) as a guideline (excluding review protocol and registration).

The phenomenon of interest was spirituality/spiritual beliefs as a factor in healthcare decision-making, specifically resuscitation decisions. The quality of the quantitative studies was evaluated based on participant selection methods and the statistical methodology that was employed to examine results. The qualitative studies were evaluated based on participant selection methods and sampling saturation, techniques to assure trustworthiness, and links to empirical data.

The literature search yielded 3,355 articles (Google Scholar *n*=1,768; ATLA Religion Database *n*=13; University All Sites Search *n*=1,171; ProQuest Dissertation and Thesis *n*=11; CINAHL *n*=40; PsychInfo *n*=100; Gray Literature *n*=9; HaPI n=243). Another 82 articles were identified through a search of references. After duplicates were removed, the 2,794 remaining articles were screened and 2,678 were excluded because the articles did not fit the subject criteria. The exclusion criteria were bereavement, education, children, birthing women, nursing students, chaplain supervision, demonic possession, marital health, and psychotherapy. The remaining 116 articles were read in full; 24 were duplicates from previous literature reviews, and

12 were excluded (single case studies, or the quality of the articles did not meet the standards of the PRISMA Checklist). The 80 residual articles were included in this review (Appendix B).

Impact of spiritual/religious beliefs on quality of life. Koenig (2011) reported that 326 quantitative studies have examined the relationship between spirituality/religion and well-being, with 256 (79%) reporting indicators of better quality of life. One study demonstrates this phenomenon particularly well. Kristeller, Rhodes, Cripe, & Sheets (2005) randomly assigned an oncologist to provide a brief 5- to 7-minute semi-structured exploration of patients' spiritual/religious concerns or usual care during office visits. After three weeks, the intervention group showed more improvement in QoL (F (1, 116) = 4.04, p< .05) compared to control patients, indicating the intervention had a positive impact on the patients' perception of quality of care and well-being. The apparent correlation between spiritual/religious beliefs and quality of life in the clinical setting is foundational to examining the associations between each of these factors and resuscitation decisions.

Factors that affect resuscitation decisions. Patients' healthcare decisions may be influenced by a wide variety of factors, including religious beliefs (Phelps et al., 2009; Sharp et al., 2012; van Leeuwen, Tiesinga, Jochemsen, & Post, 2007), values (Leichtentritt & Rettig, 2001), culture, and quality of life (Kelley et al., 2010). Families and healthcare providers may influence patients' healthcare decisions (Blanchard et al., 1988; Jaul et al., 2014; Winzelberg et al., 2005), and patients may make decisions based upon emotions (Lockenhoff & Carstensen, 2004), perceived prognosis (Kypriotakis, Francis, O'Toole, Towe, & Rose, 2014; Laakkonen, Pitkala, Strandberg, Berglind, & Tilvis, 2005), and knowledge about and burden of treatment (Allen, Allen, Hilgeman, & DeCoster, 2008; Belanger, Rodriguez, & Groleau, 2011; Drought &

Koenig, 2002; Fried et al., 2007; Kaldjian et al., 2009; Leichtentritt & Rettig, 2001; Marco & Larkin, 2008; Rodriguez & Young, 2006), and expectations (Ireland, 2010).

Assumptions regarding the influence of age, functional status, and diagnosis on resuscitation decisions have been postulated assuming that as they age, become more dysfunctional, or suffer a reduced quality of life, patients would prefer no resuscitation. Research on this topic appears to be inconclusive, however. For example, Winter, Lawton, and Ruckdeschel (2003) describe a willingness by patients to tolerate more life-prolonging treatments the closer they are to death, whereas Barry and Henderson (1996) found patients shortly after diagnosis desired more life-prolonging care, while closer to death quality of life was more important. Singer, Martin and Kelner (1999) likewise found patient populations with more dire diagnoses who did not want death prolonged: residents in a long-term care facility (n=38), dialysis patients (n=48), and people with human immunodeficiency (n=40) maintained that quality end-of-life was "avoiding inappropriate prolongation of dying." This domain was rated most important from all three patient populations, even higher than receiving adequate pain and symptom management (Singer et al., 1999).

Diagnosis-specific research on healthcare decisions has been limited to cancer, HIV, and end-stage heart disease; considering the different disease trajectories and treatment options, comparison is difficult (Murray et al., 2007; Woods & Ironson, 1999). A single study demonstrated fatigue and positive feelings were associated with resuscitation decisions (Voogt et al., 2005).

Impact of spiritual/religious beliefs on resuscitation decisions. The literature indicates that in clinical settings, associations between spiritual/religious beliefs and resuscitation decisions vary. Although patients report that spiritual/religious beliefs influence their medical decisions (Ehman, Ott, Short, Ciampa, & Hansen-Flaschen, 1999; Gauthier, 2005; Gauthier & Swigart, 2003; Silvestri, Knittig, Zoller, & Nietert, 2003; Sullivan, Muskin, Feldman, & Haase, 2004; Volker & Wu, 2011), several reviews have indicated religious doctrine does not require resuscitation at the end-of-life (Bauer-Wu, Barrett, & Yeager, 2007; Bulow et al., 2008; Carey & Cosgrove, 2006; Puchalski & O'Donnell, 2005).

Some studies reveal associations between spiritual/religious beliefs and a desire to prolong life. For example, in a longitudinal descriptive study of 1,138 Israelites over the age of 70, life-sustaining treatments were preferred by the religious more than the secular (Carmel & Mutran, 1999). In another study of 345 patients with advanced cancer, Phelps, et al. (2009) found that positive religious coping was significantly associated with preferring heroic measures (38.3% vs. 8.6%; OR, 6.60 [95% CI, 3.53-12.36]) and was a significant predictor of choosing intensive life-prolonging care (adjusted odds ratio [AOR], 2.90 [95% CI, 1.07-7.89]; *P*= .04). Also, Van Ness, Towle, O'Leary, and Fried (2008) found in a study of 226 older community dwelling members with advanced cancer, congestive heart failure, or chronic obstructive pulmonary disease, that those who "grew closer to God" (OR =1.79; 95% CI = 1.15, 2.78) or "grew spiritually" (OR = 1.61; 95% CI = 1.03, 2.52) were more willing to take the "risk" of full resuscitative measures.

Other studies found no specific spiritual/religious associations with resuscitation preferences. Karches, Chung, Arora, Meltzer, & Curlin (2012) found that religious

characteristics and spirituality were not significantly associated with having a "Do Not Resuscitate" (DNR) order in the hospitalized patient population. Eighty-six percent of this sample population was not terminally ill (*N*=8,308; 86% participation rate); 10.4% (*n* = 864) had DNR orders. Similarly, Kypriotakis, Francis, O'Toole, Towe, & Rose (2014) found that spiritual well-being and religiousness was not associated with a preference for resuscitation in a comparison of 196 Caucasian and African American cancer patients.

Instruments Used to Measure Spiritual/Religious Beliefs of Hospitalized Patients

Qualitative measures. Three types of assessments were found in the literature that describe how spiritual/religious beliefs are shared with healthcare professionals (Holloway, Adamson, McSherry, & Swinton, 2011; Hunt, Cobb, Keeley, & Ahmedzai, 2003). Bedside nurses frequently use a spiritual/religious *screening* to determine a patient's spiritual needs (Galek, Flannelly, Vane, & Galek, 2005), a trained multidisciplinary specialist will gather a spiritual *history* (Anandarajah & Hight, 2001), and a chaplain or spiritual advisor specialist will administer a spiritual/religious *assessment*, (Flannelly, Galek, Tannenbaum, & Handzo, 2007; Koenig, 2011; Puchalski, et al., 2009).

Quantitative scales. Quantitative spiritual/religious beliefs scales are used to research populations and determine the effects of spiritual/religious interventions, with spiritual/religious beliefs most often measured based on internal beliefs and external practices (Koenig, 2011).

Monod et al.'s (2011) literature review identified 35 scales measuring spiritual beliefs in clinical research. Four types of spiritual assessment scales were identified: general spirituality *(n*=22), spiritual well-being (*n*=5), spiritual coping (*n*=4), and spiritual needs (*n*=4). Each scale was measured on three methods of expression: cognitive (attitudes and beliefs toward 16

Few studies were found in the literature search that examined the associations between spiritual/religious beliefs and resuscitation decisions; those that exist are limited by small sample sizes, homogeneous samples, and lack of validation of qualitative results. It is unclear if the lack of consistency among results is due to the methodology, the samples studied, or the choice of spiritual/religious scale utilized.

Theoretical Model: Spiritual/Religious Beliefs and Resuscitation Decisions

Figure 4 illustrates the lack of a clear association between spiritual/religious beliefs and resuscitation decisions.

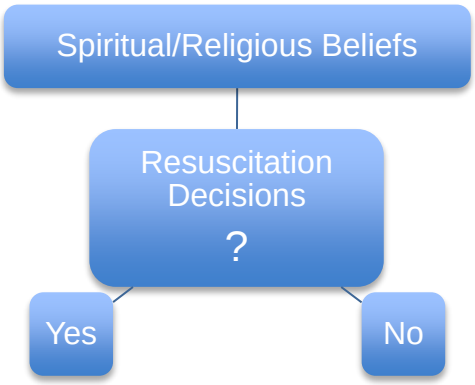


Figure 4. Spiritual/Religious Beliefs and Resuscitation Decisions

Gaps in the Literature

There is limited research examining the associations between the spiritual/religious beliefs of hospitalized patients and their resuscitation decisions. Nor are there valid and reliable spiritual/religious scales that have been tested with hospitalized patients.

Summary

There is evidence suggesting an association between spiritual/religious beliefs and resuscitation decisions in palliative care populations. However, because of the paucity of

published research, it is unclear if any associations between spiritual/religious beliefs and resuscitation decisions exist in hospitalized patients. Thus, the purpose of this study is to examine the associations between spiritual/religious beliefs and resuscitation decisions in hospitalized patients.

Chapter 3. Methodology

This descriptive study examined the associations between hospitalized patients' spiritual/religious beliefs and their resuscitation decisions.

Study Design

A descriptive correlational study was conducted with a convenience sample of 84 hospitalized patients. Based on the literature of Monod, et al. (2011), two spiritual/religious beliefs assessment scales, each with a "comprehensive validation process score of 5/6" (p. 1347), were incorporated into the study.

Study Aims

Aim 1. Describe the demographic and clinical characteristics of the sample patient population.

Aim 2. Explore the relationships within and between the two spiritual/religious beliefs scales.

Aim 3. Examine the associations between resuscitation decisions and demographics (gender; ethnicity) and spiritual/religious beliefs.

Aim 4. Examine the differences between the resuscitation decision (Full code; DNAR), demographic (gender; ethnicity) and spiritual/religious beliefs groups (traditional theistic; non-theistic).

Setting

The study took place at The Queen's Medical Center-Punchbowl (QMC), Honolulu, Hawai‘i. The institution is a private, nonprofit, acute tertiary care facility with 505 acute and 28 sub-acute licensed beds.

Participants

Eighty-four patients were recruited from a population of adult hospitalized patients. An estimated sample size of 84 patients was calculated with a two-tailed test, 0.3 effect size, desired power = .80, and $\alpha = .05$ (Faul, Erdfelder, Buchner, & Lang, 2009).

Inclusion criteria. Included in the study were hospitalized patients:

- Under acute, skilled, or intermediate levels of care in QMC: including contact and protective isolation.
- Under the care of a QMC hospitalist or gerontologist.
- $\geq$ 18 years old.
- Oriented to person and place.
- Not currently cared for by the pain or palliative care team.
- Who demonstrated mild or no intellectual impairment with the Montreal Cognitive Assessment (MoCA) (Nasreddine, 2003) (Appendix C) (score of $\geq$ 26).
- Who consented to participate and complete the questionnaire.
- Who were able to read, write, and speak English.
- Who were able to read at an 18-point font size.

Exclusion criteria. Excluded from the study were:

- Patients under the care of a community physician.
- ICU patients.
- Patients with moderate to severe intellectual impairment as indicated by the MoCA (score < 26).
- Patients under the age of 18.
- Patients currently under the care of the researcher (a member of the Pain & Palliative Care Service).
- Hospitalized prisoners.
- Patients hospitalized for psychiatric diagnosis.
- Patients in respiratory isolation (questionnaire may have droplet contamination).

Conceptual Definitions

Resuscitation decision. The individual's desire for medical intervention in order to be retrieved from death or near death.

Spiritual/religious beliefs. The personal beliefs that may give meaning to life and bring faith, hope, peace, and empowerment (Miner-Williams, 2006). "An assent or conviction about a domain or existence that goes beyond the material world. This includes all manner of religious or other beliefs that are not based upon materialism" (King & Koenig, 2009).

Pain. An unpleasant sensory and emotional experience associated with actual or potential tissue damage (IASP, 1994).

Current length of hospitalization. The time from patient's admission to QMC to day of interview (measured in days), as calculated by researcher.

Measures

Montreal Cognitive Assessment (MoCA). MoCA is a 30-point cognitive screening tool used to detect mild cognitive impairment (Nasreddine et al. 2005). MoCA includes elements that test short-term memory recall, visuospatial abilities, executive function, attention-concentration-working memory, language, and orientation to time-place. MoCA demonstrates 90% sensitivity in identifying mild cognitive impairment and 100% in identifying mild Alzheimer's. MoCA correlation between test and re-test is very high (correlation coefficient = .92, P <.001).

Spiritual beliefs and resuscitation decision questionnaire (Appendix D). This written questionnaire was comprised of three sections (demographics and current health status, spiritual/religious beliefs assessment, and resuscitation decision):

Demographics and current health status. Patients were asked to specify:

- Gender
- Age
- Social support (relationship status)
- Activities needing assistance (activities performed for self-care, such as eating, bathing, dressing, or grooming)
- Primary spiritual/religious belief—patients' responses were then categorized into two groups (C. Liu, personal communication January 16, 2016): 1) *traditional theistic beliefs* (Christian, Catholic, Jewish, Mormon, Protestant)

and 2) *non-theistic beliefs* (Agnostic, Atheist, Buddhist, and Native Hawai‘ian)

- Race/ethnicity
- Medical diagnosis/co-morbidities—patients' responses were then categorized as either low or high risk of death. *Low risk of death during hospitalization (low risk)* was codified as participants with 0-3 medical diagnosis/co-morbidities. *High risk of death during hospitalization (high risk)* was codified as participants with 4+ medical diagnoses/co-morbidities, and/or a cancer diagnosis, and/or a liver disease diagnosis.
- Current pain level, on a scale of 0-10.

Spiritual/religious beliefs assessment. Two assessment scales were utilized to ascertain the spiritual/religious beliefs of the participants: the Spiritual Involvement and Beliefs Scale-Revised (SIBS-R) and the Beliefs and Values Scale (BVS).

SIBS-R. SIBS-R is a second generation, 22-item, seven-point Likert-type scale (Hatch, Burg, Naberhaus, & Hellmich, 1998) that measures cognitive and behavioral expressions (Appendix E). The original Spiritual Involvement and Beliefs Scale (SIBS) is a 39-item scale that was developed to measure spiritual actions and beliefs across religious traditions (Hatch et al., 1998). It was developed in a study of 50 patients and 33 family practice professionals in a rural family practice clinic, with a retest (seven to nine months after initial administration) of 22 patients and 14 professionals. Both SIBS and SIBS-R earn a Cronbach's α (alpha) of .92, demonstrating high internal consistency (Hatch et al., 1998).

SIBS-R response options range from 1 (*strongly disagree*) to 7 (*strongly agree*), except for the final item, which asks participants to rank how spiritual they consider themselves to be on a 7-point scale (with '7' being the most spiritual). The scale's scoring range is thus 22-154, with a higher score reflecting "an individual who is strongly spiritual" (Hatch et al., 1998, p. 483).

SIBS-R is divided into four subscales, though some of the questions are on more than one subscale. The four subscales are:

- External/ritual (16 questions), which reflects the activities consistent with a belief in an external power.
- Internal/fluid (5 questions), which reflects the evolution and growth of internal beliefs.
- Existential/meditative (2 questions).
- Humility/personal application (1 question), which reflects humility and principles.

SIBS-R has been used to examine various healthcare populations, including HIV-positive persons and hospice patients, but there is no published research to date examining hospitalized patients (Conner, 2012; Litwinczuk & Groh, 2007).

BVS. BVS (Appendix F) (King et al., 2006), is a Likert-type scale to measure cognitive, behavioral, and affective expressions. This scale was developed to measure spirituality for use in clinical research. BVS consists of 20 items with response options ranging from 0 (*strongly disagree*) to 4 (*strongly agree*). The scale's total scoring range is 0-80, with a higher score

reflecting “stronger spiritual beliefs” (King et al., 2006, p.418). With a Cronbach’s alpha of .94, the BVS also demonstrates high internal consistency.

BVS consists of two subscales:

- Factor 1 addresses spiritual beliefs in a religious context (17 questions).
- Factor 2 addresses spiritual beliefs outside of a religious context (3 questions).

BVS was developed in a study of 89 oncology/home palliative care/inpatient hospice patients and 165 students and staff (King et al., 2006). Mean scores on the final version of the BVS varied significantly among several demographic characteristics, including religious belief. The score of participants with no form of religious belief (mean score 51.7, SD = 13.0) was 20.6 points lower ($t = 11.9$, $p < 0.0001$) than the remainder (72.3, SD = 12.1), demonstrating the scale’s efficacy in assessing spirituality.

BVS has since been used to investigate the relationship between strength of spiritual beliefs and anxiety or depression, medication intake, and survival of home patients with advanced disease. It has also been used to evaluate whether the strength of spiritual beliefs changes as death approaches (King et al., 2013). There is no published research to suggest it has been used to examine hospitalized patients.

Resuscitation decision. The patient was required to check-mark a yes or no response to two questions:

- If your heart were to stop would you want someone to try to restart it?
- If you were to stop breathing would you want a breathing tube and machine?

Patient responses of "yes" to either of the resuscitation decision questions were categorized as a "yes."

Procedure

Recruitment. Charge nurses identified potential participants who were in the care of a QMC attending physician, not currently on Pain & Palliative Care service, oriented to "person" (whom they are) and "place" (QMC), and able to speak English. Nurses ascertained whether the patient was sleeping or would be busy with a test or procedure during the next 30 minutes. If the patient was unavailable, the researcher returned later that day, if time allowed. The selection of nursing units was rotated on a weekly basis (Appendix G).

If the patient was available, the researcher introduced herself to the patient, introduced the study to the patient and requested 20 minutes of the patient's time to participate in the study, and requested consent (Appendix H). Each eligible patient signed his or her own signature-witnessed consent form. Upon consenting, the MoCA was administered. If the patient scored ≥26, the patient was invited to continue the study. If the patient scored <26, could not personally sign the consent form, or no witness was located, no further information was requested. In this case, the researcher thanked the patient and left the room. (See Appendix I for precise wording used during recruitment.)

Data on the number of screened who did not meet the inclusion criteria, and data on refusal rates was retained for research reporting.

Data collection. All aspects of patient participation took place in a neutral place: the patient's hospital room. The researcher attempted as much as possible to decrease the noise level

in the patient's room, e.g., close the door to the hall and ask the patient to turn off the television. If the patient was in a semi-private room, the researcher drew the curtain between the two beds. After the patient's consent was obtained and MoCA passed, the Spiritual Beliefs and Resuscitation Decision Questionnaire (Appendix D) was administered on paper. The questionnaire was printed in an 18-point font to assist in readability, and the respondent was required to make a checkmark or circle to indicate answers. The researcher was at bedside and available to answer any questions the patient had while completing the questionnaire. Completion of the questionnaire took approximately 10-15 minutes. The patient was allowed to stop completing the questionnaire at any time.

According to the data safety management plan, if the patient became distressed at any time the researcher was to call a chaplain resource, inform the patient's physician, and inform the Internal Review Board for Human Subjects: QMC and University of Hawai‘i.

Data management. To prevent inadvertent re-enrollment, all patients' names and medical record (MR) numbers were recorded on a master roster during recruitment. Data was stored in a secure file in the locked office of the researcher at QMC. A separate table of patients' names, status (didn't qualify, refused, or completed the study), MR numbers, questionnaire numbers (an ID number was assigned to each completed questionnaire), and completed questionnaires was stored in a different secure file in the same office. Data was entered into and stored on the researcher's personal, password-protected computer with only the questionnaire number as an identifier. One backup of copy of the data was kept on a password-encrypted flash drive. Only the researcher had access to the computer, passwords, and flash drive.

Analysis

All statistical analyses were performed in SPSS version 23.0.0.0 (IBM, Chicago, IL). A two-tailed test was executed, and $p < 0.05$ was treated as statistically significant.

Tests for assumptions. Tests for assumptions and normality were completed prior to final model analysis.

***Normal distribution*.** To test normal distribution for both the whole group and the two resuscitation decision groups (full code vs. do not resuscitate), the Kolmogorov-Smirnov test was employed. Test results showing $p > .05$ indicate normal distribution (Field, 2009, p. 144).

Homogeneity of variance. Levene's test was used to determine whether the variance between the two resuscitation decision groups was equal. A test result of $p > .05$ indicates variances were not different from group to group (Field, 2009).

Outliers. Data was tested for influential cases via boxplot. If the results were inconclusive, "Cook's distance" was calculated to ensure one participant had no value >1 (Field, 2009, p. 217).

Statistical methodology. Appropriate methodology was employed to analyze data relevant to each of the Study Aims.

Aim 1. Describe the demographic and clinical characteristics of the sample patient population. Analysis of demographic and clinical characteristics called for assessment of frequencies and percentages, and means, median, standard deviations, and ranges (Field, 2009). Categorical variables (gender, social support, activities needing assistance, primary spiritual/religious beliefs, ethnicity, medical diagnosis/co-morbidities, and risk of death) were

described by using frequencies and percentages. Ordinal and interval variables (SIBS-R total and subscale scores, BVS total and subscale scores, age, pain, and days hospitalized) were analyzed with respect to descriptive statistics (*mean, median, standard deviation,* and *range).*

Aim 2. Explore the associations within and between the two spiritual/religious beliefs scales. The reliability of the SIBS-R and BVS scales and comparable subscales was examined via *Cronbach's alpha* procedures. (Three of the four SIBS-R subscales—internal/fluid, existential/meditative, and humility/personal application—were not considered to have concept validity with either of the two BVS subscales—Factor 1 and Factor 2—and were not analyzed in this study.) The correlation between SIBS-R Total and External/Ritual, BVS Total, Factor 1 and Factor 2 was explored via *Pearson correlation coefficient (r)* and *Spearman's rho (r_s).*

Aim 3. Examine the associations between resuscitation decisions and demographics (gender; ethnicity) and spiritual/religious beliefs. To explore the associations between resuscitation decisions and categorical variables, chi-square with *Fisher's exact tests or cross tabulations* were conducted.

Aim 4. Examine the differences between the resuscitation decision (Full code; DNAR), demographic (gender; ethnicity) and spiritual/religious belief groups (traditional theistic; non-theistic). The mean scores of the SIBS-R and BVS were used to explore differences among these groups (Full code versus DNAR; male versus female; traditional theistic versus non-theistic) using *independent t-tests*. To compare the mean scores of the SIBS-R and BVS Total scores and Ethnic groups (Caucasian, Native Hawai‘ian/Pacific Islander, Asian, Other), an *ANOVA* was conducted.

Human Subjects Considerations

Informed consent. The study and the informed consent form were discussed with the patient. Once the patient understood the study and agreed to take part, the patient was asked to sign the consent form and was given a signed copy to keep.

Anonymity/confidentiality. All personal information was de-identified before data entry. Results of this research will only be presented as grouped data.

Penalty for non-participation/withdrawal or preferential treatment for participation. Patients had the option to withdraw from the study at any time for any reason. Participants were allowed to decline participation with no impact on the care the patient received at the time of the study or in the future. There was no preferential treatment for participation.

Risks and benefits.

Risks. Questionnaires have minimal or no potential risks involved. The risk of emotional distress regarding the resuscitation questions was minimal. The demographic data was shared only in aggregate.

Benefits. This study advances the knowledge regarding the associations between resuscitation decisions and spiritual/religious beliefs, and the spiritual/religious beliefs of patients hospitalized in Hawai‘i. It is hoped that the findings in this study will further the science of spirituality in nursing practice and eventually assist in meeting patients’ expectations for spiritual care.

Data and safety monitoring plan.

Adverse event (AE) reporting. No AE occurred. None were anticipated but would have been reported to the IRB and the study halted during investigation of the event.

Risk minimization. The risk of emotional distress regarding the resuscitation questions was minimized in three ways:

- During the consent process patients were advised that some questions could cause distress and they were not obligated to answer them.
- Because the participants were hospitalized patients, they had previously been asked similar questions, and a medical order would have been entered accordingly.
- Before presenting the participants with the final, potentially emotionally distressing questions, the researcher provided a "warning shot" by stating: "These questions may cause you distress. You are free not to answer them and please let me know if you need additional time to talk about them after you have completed the questionnaire."

Monitoring of study implementation and progress. Weekly updates were provided to the researcher's academic advisor.

Study termination, early withdrawal of individuals. Participants had the option to withdraw from the study at any time for any reason.

Confidentiality. All of the participants' information was de-identified before data entry.

Data security. Participant information/demographics was known only to the researcher. All participant information was de-identified to prevent data misrepresentation.

***Record retention*.** The researcher will retain copies of the data in a secure file for the length required by the IRB.

Limitations

The study was conducted from a convenience sample within a single hospital setting, and an acute/trauma medical care facility is not comparable to other types of facilities. In addition, patients with an attending hospitalist or gerontologist may not be representative of the hospitalized patient population overall; for example, patients with an attending hospitalist or gerontologist may be over-representative of a lower social-economic demographic and/or gerontological sample.

Summary

Once approved by The Queen's Medical Center's Research and Institutional Review committee and by a Memorandum of Understanding by the University of Hawai‘i's Human Subjects Committee, hospital patients meeting the inclusion criteria were recruited and invited to participate in the study over an eight-week period. A convenience sample of 84 patients completed the questionnaire. While maintaining patient confidentiality, the data was described, analyzed and reported in order to examine associations between spiritual/religious beliefs and resuscitation decisions in hospitalized patients.

Chapter 4. Results

Sample Recruitment

Four hundred and three patients were under the care of QMC physicians at the time of data collection (November 20, 2015 to January 16, 2016). Data were collected on 49 days on a random rotation of nursing units (Appendix G).Twenty-seven patients were on Pain & Palliative Care Service and were not eligible for recruitment. Staff nurses identified 311 who spoke English, 291 of whom were oriented to person and place. Of those 291 patients, 156 were available. Six of those were sleeping, had visitors, or were not in their room when recruitment was attempted and 56 declined to participate in the study. Ninety-four patients provided consent, and 84 scored ≥26 on the MoCA and completed the survey (56% participation rate out of 150 eligible participants). Analysis herein is based upon the final 84 participants unless otherwise noted.

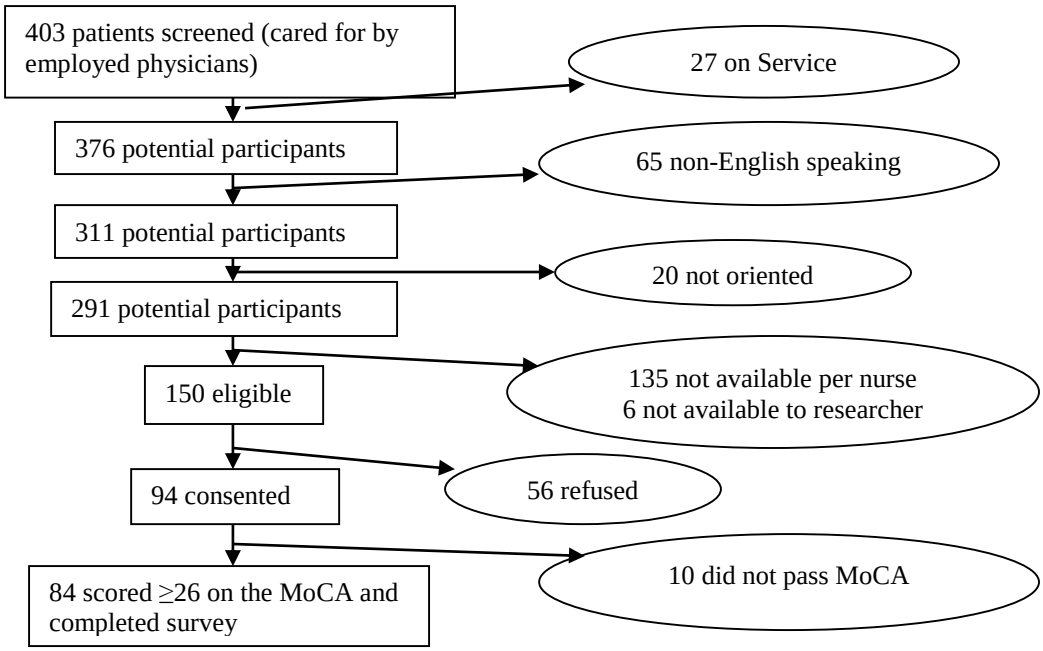


Figure 5. Patient Recruitment

Participants' Demographic and Clinical Characteristics

The demographic and clinical characteristics of the study group are shown in Table 3 and Table 4. All characteristics were self-identified with the exception of days hospitalized, which was calculated according to participant medical records, and risk of death, which was determined by number and type of medical diagnosis. Fifty-seven participants were male (67.9%), and sixty-six identified traditional theistic spiritual beliefs (78.6%). Twenty-seven participants identified their ethnicity as Caucasian (32.1%), 20 cited Asian (23.8%), 26 Native Hawai‘ian/Pacific Islander (30.9%), and 11 cited their ethnicity as "Other" (14.3%). Out of the sample population in this study, 34.5% were codified as high risk of death during this hospitalization (n = 29). The mean age of participants was 58.61 (±15.6 SD) years old (range 22-89), mean pain level was 5.39 (±3.34 SD) (range 0-10), and mean days hospitalized was 10 (±10.91 SD) (range 1-68).

Eighty-three percent of participants (n = 70) answered "yes" to one or both of the resuscitation decision questions and categorized as "Full code" participants for purposes of this study. The remaining 17% responded "no" to the two resuscitation decision questions and categorized as "DNAR" participants (n = 14).

Table 3.

Demographic Characteristics (N = 84)

Characteristics	**Full Code**	**DNAR**	**Total**
	***n*/%**	***n*/%**	***n*/%**
Gender *			
Male	46/65.7	11/78.6	57/67.9
Female	24/34.3	3/21.4	27/32.1
Ethnicity			
Asian	17/24.3	3/21.4	20/23.8
Caucasian	22/31.4	5/35.7	27/32.1
Native Hawai‘ian/Pacific Islander	21/28.6	5/35.7	26/30.9
Other	10/15.7	1/7.1	11/14.3
Primary spiritual/religious beliefs			
Traditional Theistic	57/81.4	9/64.3	66/78.6
Non-theistic	13/18.6	5/35.7	18/21.4
Social support			
Married or supportive person	35/50.0	6/42.9	41/48.8
Single, divorced, or widowed	35/50.0	8/57.1	42/51.2
Medical diagnosis/co-morbidities			
Low risk of death	44/62.9	11/78.6	55/65.5
High risk of death	26/37.1	3/21.4	29/34.5
Activities needing assistance			
No needs	35/50.0	10/71.4	46/54.8
1-3 needs	23/32.9	2/14.3	23/27.4
4-6 needs	12/17.1	2/14.3	15/17.9

* $p < 0.05$

Table 4.

Additional Demographics

Scores (N=84)	**Full Code** ***M±SD***	**DNAR** ***M±SD***	**Total** ***M±SD***	**t(df)**	**p-value**
Age (70)/(14)	58.19±15.97	60.71±14.05	58.61±15.62	.551(82)	.583
Pain (70)/(14)	5.15±3.24	6.61±2.49	5.39±3.34	1.500(82)	.138
Days Hospitalized (70)/(14)	10.56±11.26	8.50±9.14	10.21±10.91	-.642(82)	.523
SIBS-R Total (69)/(13)	115.51±22.19	113.62±25.26	115.21±22.55	-.276(80)	.783
SIBS-R External/Ritual (70)/(13)	82.19±19.27	83.31±22.39	82.36±19.65	.188(81)	.851
BVS Total (68)/(14)	60.00±16.95	59.21±24.58	59.87±18.29	-.145(80)	.885
BVS Factor 1 (68)/(14)	50.40±16.17	50.71±21.16	50.45±16.98	.063(80)	.950
BVS Factor 2 (70)/(14)	9.57±1.85	8.50±3.67	9.39±2.26	-1..06(82)	.106

Tests for assumptions

Tests for assumptions and normality were completed prior to final model analysis.

Normal distribution. The Kolmogorov-Smirnov test was used to determine if the distribution as a whole deviates from a normal distribution (Field, 2009, p. 144). The whole group demonstrated significant non-normal distribution ($p < .05$) (Table 5).

Table 5.

All Participants Distribution

	Kolmogorov-Smirnov		
	Statistic	**df**	**Sig.**
Age	.102	84	.031*
Pain	.137	84	.001**
Days hospitalized	.199	84	< .001***
SIBS-R Total	.121	82	.005**
SIBS-R External/Ritual	.139	83	< .001***
BVS Total	.143	82	< .001***
BVS Factor1	.151	82	< .001***
BVS Factor2	.133	84	.001**

*p< .05, ** p< .01, *** p < .001

No data transformations were made prior to data analysis.

Within the two resuscitation groups, some variables demonstrated normal distribution, and some non-normal distribution (Table 6). In the Full code subgroup, age was the only variable with normal distribution [$D(70) = .099$, $p > .05$]; all the other variables represented non-normal distribution. Three variables within the DNAR subgroup (n=14) showed significant non-normal distribution: days hospitalized [$D(14) = .292$, $p = .002$], BVS Total score [$D(14) = .242$, $p = .026$], and BVS Factor 1 [$D(14) = .233$, $p = .003$]. The remaining variables in the DNAR subgroup were normally distributed.

Table 6.

Full Code and DNAR Distribution

		Statistic	df	*P*[a]
Age	Full code	.099	70	.086
	DNAR	.159	14	.200
Pain	Full code	.138	70	.002**
	DNAR	.169	14	.200
Days hospitalized	Full code	.198	70	< .001***
	DNAR	.292	14	.002**
SIBS-R Total	Full code	.115	69	.024*
	DNAR	.220	13	.084
SIBS-R Ext./Rit.	Full code	.131	70	.004**
	DNAR	.187	13	.200
BVS Total	Full code	.121	68	.015*
	DNAR	.242	14	.026*
BVS Factor1	Full code	.138	68	.003*
	DNAR	.233	14	.039
BVS Factor2	Full code	.134	70	.003**
	DNAR	.199	14	.139

[a]Kolmogorov-Smirnov, *p< .05, ** p< .01, *** p < .001

Homogeneity of variance. Levene's test was used to determine whether the variance of the variables was equal (Field, 2009, p.149). Homogeneity of variance testing for the variables pain, age, and days hospitalized, and SIBS-R Total, SIBS-R External/Ritual, BVS Total, and BVS Factor 1 scores found the variances were equal between the Full code and DNAR subgroups (Table 7). Test results for BVS Factor 2 revealed the variances were significantly different between the Full code and DNAR subgroups [$F(1, 82) = 9.35$, $p = .003$] (Table 7); between the two subgroups the variable is not stable at all levels (Field, 2009).

Table 7.

Homogeneity of Variance - Full Code and DNAR

Based on Mean	Levene Statistic	df1	df2	Sig.
Age	.778	1	82	.380
Pain	2.854	1	82	.095
Days hospitalized	.320	1	82	.573
SIBS-R Total	.156	1	80	.694
SIB-R External/Ritual	.001	1	81	.980
BVS Total	1.382	1	80	.243
BVS Factor 1	.563	1	80	.455
BVS Factor 2	9.348	1	82	.003

Outliers. Data was tested for influential cases via box plot. Due to the uncertainty of outliers (days hospitalized, Full code subgroup and DNAR subgroup) revealed in a box plot, (Figure 6), a "Cook's distance" was calculated for those variables (Field, 2009, p. 217). The results were within a range (.001 - .224) indicating no specific participants were influential. There were no data adjustments as no participants were considered outliers.

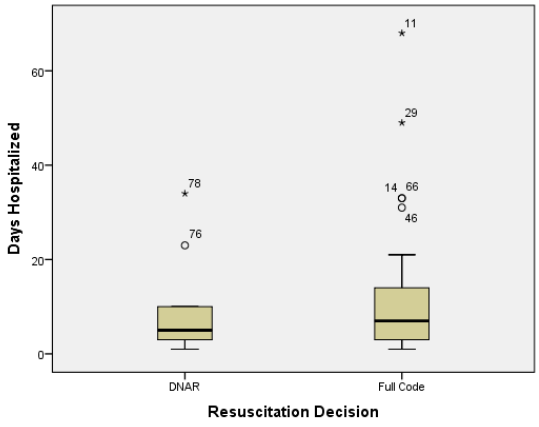


Figure 6. Box Plot of Resuscitation Decisions (DNAR and Full code) and Days Hospitalized

Instrument Evaluation

Several tests for assumptions and reliability were conducted to evaluate the instruments selected for use in the study. Each of these tests is described below.

Cronbach's alpha and instrument reliability. Reliability of both spiritual/religious beliefs scales was determined using Cronbach's alpha, a measurement of the reliability of the scale determined by the number of items squared multiplied by the average covariance between items and divided by the sum of all the elements in the variance-covariance matrix (Field, 2009, p.784). DeVellis (2012) designates alpha ratings as follows: <.60 unacceptable, .65-.70 minimally acceptable, .80-.90 very good, and >.90 consider shortening the scale. The Cronbach's alpha for the SIBS-R Total scale was $\alpha = .88$, and for External/Ritual subscale was $\alpha = .90$. The Cronbach's alpha for the BVS Total scale was $\alpha = .96$, Factor 1 subscale was $\alpha = .96$, and the BVS Factor 2 subscale was $\alpha = .67$.

Correlations—spiritual/religious beliefs scales. Pearson's *r* and Spearman's rho were used to examine correlations between the SIBS-R and BVS.

Pearson's Correlation Coefficient r. "Pearson's correlation requires only that the data are interval for it to be an accurate measure of the linear relationship between two variables" (Field, 2009, p. 177). Table 8 reports the Pearson's coefficient *r* correlations between the two spiritual/religious belief scales. Analysis revealed significant high correlations between the SIBS-R and BVS Total scores (Figure 7), and between the SIBS-R Total scores and BVS Factor 1 scores (Figure 8). There were also significant correlations between the SIBS-R External/Ritual and BVS Total scores (Figure 9), and between SIBS-R External/Ritual and BVS

Factor 1 Scores (Figure 10). SIBS-R Total and BVS Factor 2 Scores (Figure 11), and SIBS-R External/Ritual and BVS Factor 2 Scores (Figure 12), while statistically significant, demonstrated moderate correlation.

Table 8.

Correlations Between Spiritual/Religious Beliefs Scales Scores - Pearson's Coefficient r

	SIBS-R Total	External/Ritual
BVS Total	.766***	.791***
Factor 1	.756***	.788***
Factor 2	.537***	.493***

***$p < .001$

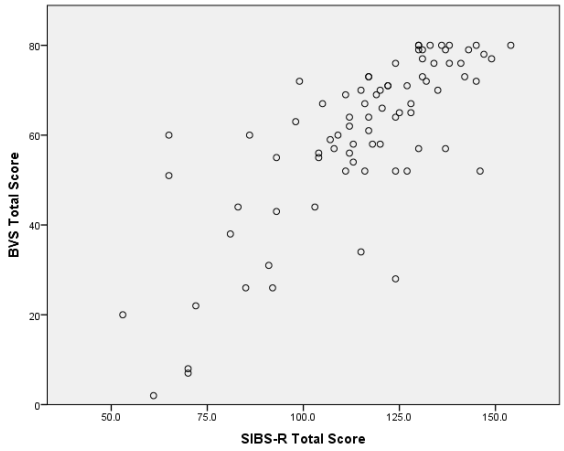


Figure 7. SIBS-R and BVS Total Scores

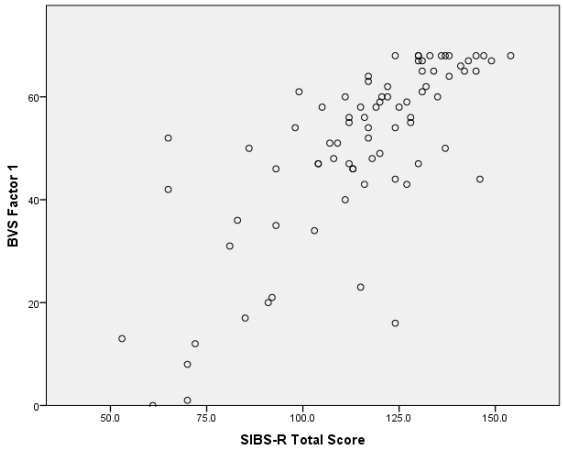


Figure 8. SIBS-R Total and BVS Factor 1 Scores

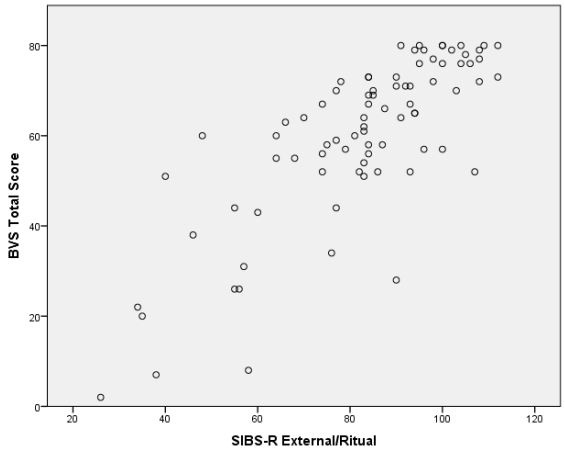


Figure 9. SIBS-R External/Ritual and BVS Total Scores

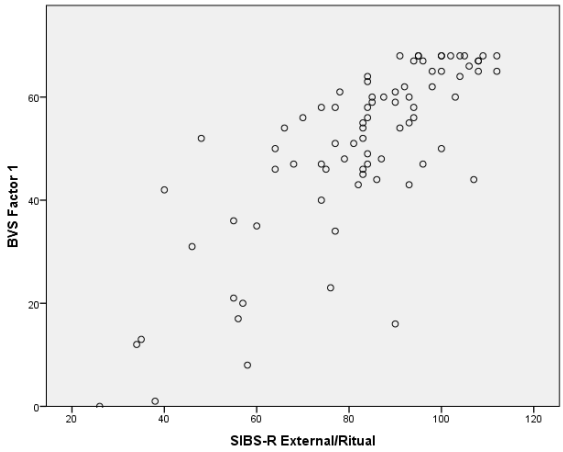


Figure 10. SIBS-R External/Ritual and BVS Factor 1 Scores

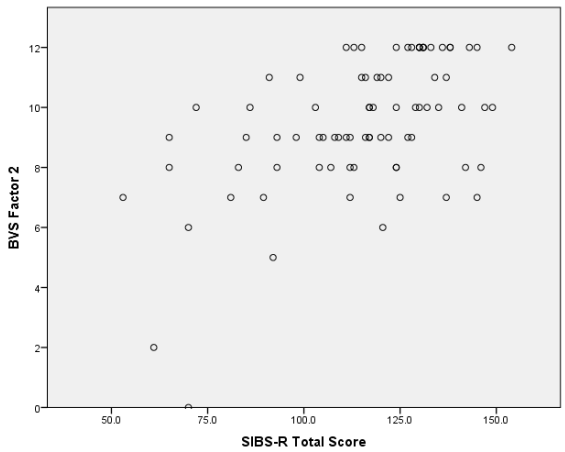


Figure 11. SIBS-R Total and BVS Factor 2 Scores

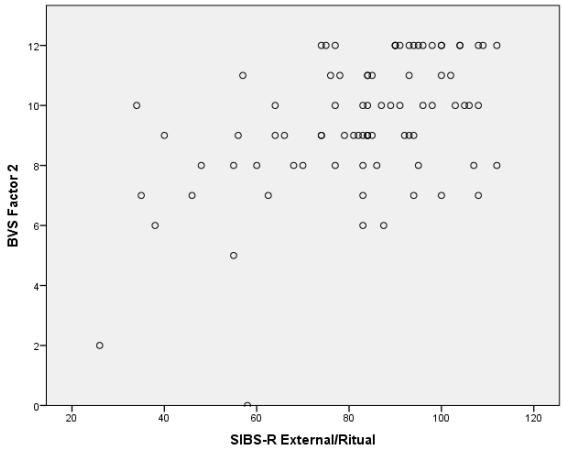


Figure 12. SIBS-R External/Ritual and BVS Factor 2 Scores

Spearman's rho. Spearman rho (r_s), "is a non-parametric statistic and so it can be used when the data have violated parametric assumptions such as non-normally distributed data" (Field, 2009, p. 179) and was used to examine the two scales and subscales. Table 9 reports the correlations between the two spiritual/religious belief scales. The analysis revealed significant correlations between the SIBS-R and BVS Total scores, and between the SIBS-R Total scores

and BVS Factor 1 scores. There were also significant correlations found between the SIBS-R External/Ritual and BVS Total scores, and between SIBS-R External/Ritual and BVS Factor 1 scores. Correlations between BVS Factor 2 and SIBS-R Total scores, and BVS Factor 2 and SIBS-R External/Ritual scores, while statistically significant, demonstrated moderate correlation.

Table 9.

Correlations Between Spiritual/Religious Beliefs Scales Scores - Spearman's rho

	SIBS-R Total	**External/Ritual**
BVS	.747***	.761***
Factor 1	.748***	.769***
Factor 2	.478***	.434***

***$p < .001$

Comparisons of Demographic and Spiritual/Beliefs Scales Between Full Code and DNAR Groups

Fischer's exact test is used to determine the exact probability if the "sampling distribution of the chi-square statistic deviates substantially from the chi-square distribution" (Field, 2009, p.786). Analysis of each demographic characteristic revealed no significant difference between the Full code and DNAR groups (p>.05), nor were any significant differences found between the Full code and DNAR groups in reported SIBS-R and BVS scores (p>.05) (Tables 10 and 11).

Table 10.

Comparison of Categorical Characteristics Between Full Code and DNAR Groups

Measures	**Full code**	**DNAR**	***P***
	***n* (%)**	***n* (%)**	
Gender			
Male	46 (65.71)	11 (78.57)	.532[a]
Female	24 (34.29)	3 (21.43)	
Primary spiritual/religious beliefs:			
Traditional theistic	57 (81.43)	9 (64.3)	.167[a]
Non-theistic	13 (18.57)	5 (35.71)	
Social support			
Married or supportive person	35 (50.00)	6 (42.86)	.772[a]
Single, divorced, or widowed	35 (50.00)	8 (57.14)	
Ethnicity			
Caucasian	22 (31.43)	5 (35.71)	.877[b]
Native Hawai‘ian/Pacific Islander	21 (30.00)	5 (35.71)	
Asian	17 (24.29)	3 (21.43)	
Other	10 (14.29)	1 (7.14)	
Risk of Death			
Low	44 (62.86)	11 (78.57)	.361[a]
High	26 (37.14)	3 (21.43)	
Activities needing assistance:			
No needs	35 (50.00)	10 (71.43)	.300[b]
1-3 needs	23 (32.86)	2 (14.29)	
4-6 needs	12 (17.14)	2 (14.29)	

[a]*Fisher's exact test, 2-tailed;*
[b]*Pearson Chi-square*

Table 11.

Comparison of Ordinal Characteristics Between Full Code and DNAR Groups

Measures	Full (n=70)		DNAR (n=14)			
	M	***SD***	***M***	***SD***	***t(df)***	***P***[a]
Age	58.19	15.97	*60.71*	*14.05*	-.55(82)	.583
Pain (70)/(14)	5.15	3.45	6.61	2.49	-1.50(82)	.138
Days hospitalized (70)/(14)	10.56	11.26	8.50	9.14	.642(82)	.523
SIBS-R Total (69)/(13)	115.51	22.19	113.62	25.26	-.09(80)	.928
SIBS-R External/Ritual (70)/(13)	82.19	19.27	83.31	22.39	-.19(81)	.851
BVS Total (68)/(14)	60.00	16.95	59.21	24.58	.15(80)	.885
BVS Factor 1 (68)/(14)	50.40	16.17	50.71	21.16	-.06(80)	.950
BVS Factor 2 (70)/(14)	9.57	1.85	8.50	3.67	1.64(82)	.106

[a]*Independent t-test*

Differences Between Groups and Spiritual/Religious Beliefs Scales

Analysis was conducted to examine differences between the mean total scores and scores of the SIBS-R and BVS and three variables: gender (male/female), primary beliefs codified as traditional theistic or non-theistic, and ethnicity (Caucasian, Native Hawai‘ian/Pacific Islander, Asian, Other). Independent t-tests were used to explore differences in these groups (male versus female; traditional theistic versus non-theistic) compare the means of the SIBS-R and BVS total scores and SIBS-R External/ritual and BVS Factor 1 scores. To compare the means of the SIBS-R and BVS total scores and SIBS-R External/ritual and BVS Factor 1 scores ethnicity groups (Caucasian, Native Hawai‘ian/Pacific Islander, Asian, Other), an *ANOVA* was conducted.

Gender. Table 12 shows a comparison of BVS Total and Factor 1 scores by gender: female BVS Total mean scores (M = 65.73, SD = 11.540), [$F(1,80) = 4.062$, $p = .047$] and Factor 1 subscale mean scores (M = 55.85, SD = 10.46), [$F(1,80) = 3.987$, $p = .049$] as compared to male scores (BVS Total M = 57.14, SD = 20.21), (Factor 1 subscale M = 47.95, SD = 18.30).

Figure 13 and Figure 14 illustrate the significant statistical difference between the BVS Total and Factor 1 scores of male and female participants.

Table 12.

Comparison of Spiritual/Religious Beliefs Scale Scores by Gender

		Mean	SD	F	*P*[a]
BVS Total	Male	57.14	20.21	4.06	.047*
	Female	65.73	11.54		
Factor 1	Male	47.95	18.83	3.99	.049*
	Female	55.85	10.46		

[a]*Independent T-test,* ***p* < .05

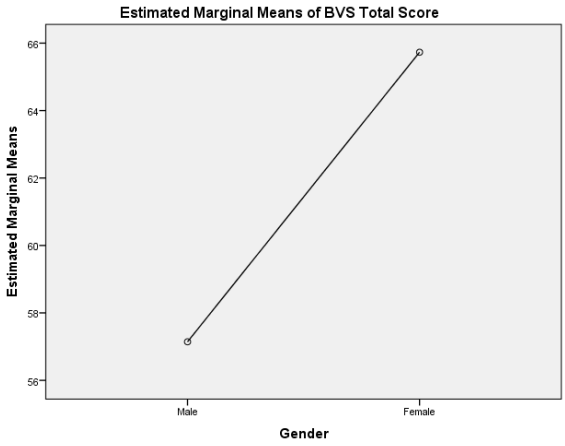


Figure 13. BVS Total Scores and Gender

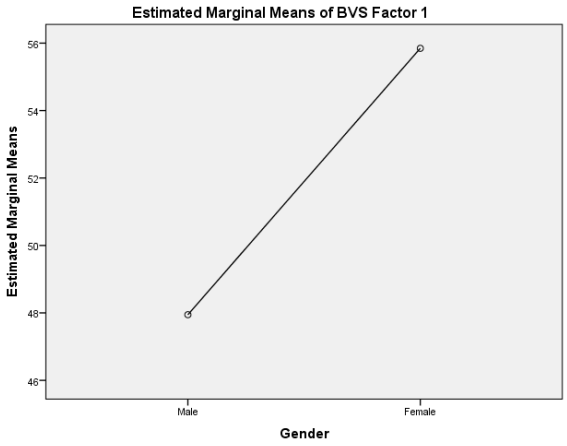


Figure 14. BVS Factor 1 Scores and Gender

Primary spiritual/religious beliefs. Participants with traditional theistic beliefs had significantly different SIBS-R Total and External/Ritual scores and BVS Total and Factor 1 scores than those with non-theistic beliefs (Table 13). Figure 15 and Figure 16 illustrate the significant statistical difference between the SIBS-R Total and External/Ritual scores of participants with traditional theistic beliefs and those with non-theistic beliefs.

Table 13.

Comparison of SIBS-R and BVS Mean Scores by Traditional Theistic Versus Non-Theistic Beliefs

		Mean	SD	F	*P*[a]
SIBS-R Total	Traditional Theistic	120.172	19.1285	16.914	< .001***
	Non-Theistic	97.556	25.3638		
SIBS-R Ext./Rit.	Traditional Theistic	86.83	16.310	18.888	<.001***
	Non-Theistic	66.22	22.556		
BVS Total	Traditional Theistic	64.97	12.260	31.135	<.001***
	Non-Theistic	41.72	24.299		
BVS Factor 1	Traditional Theistic	55.38	11.217	34.743	<.001***
	Non-Theistic	32.94	22.161		

[a]*Independent t-test,* ***$p < .001$

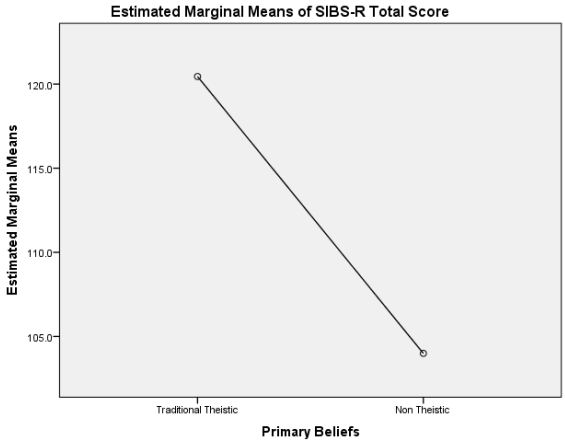


Figure 15. SIBS-R Total Score and Primary Spiritual/Religious Beliefs

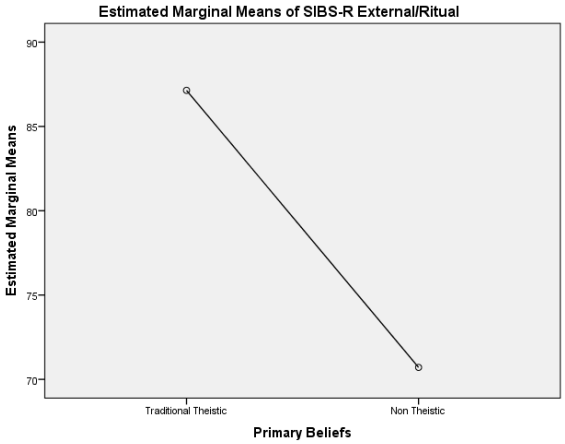


Figure 16. SIBS-R External/Ritual Score and Primary Spiritual/Religious Beliefs

Similarly, Figure 17 and Figure 18 illustrate the significant statistical difference between the BVS Total and Factor 1 scores of participants with traditional theistic beliefs and those with non-theistic beliefs.

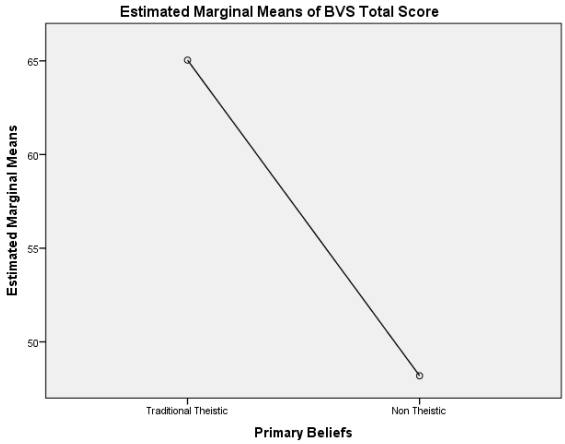


Figure 17. BVS Total Scores and Primary Spiritual/Religious Beliefs

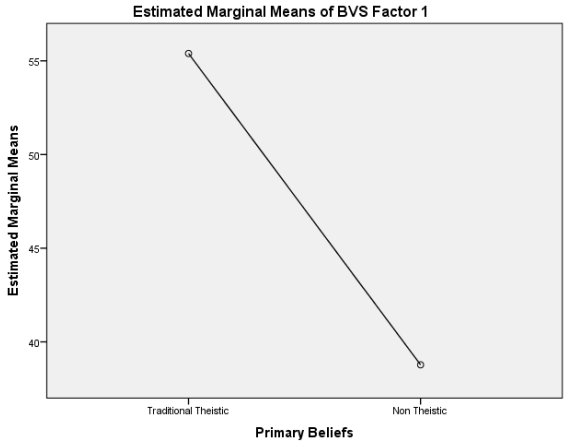


Figure 18. BVS Factor 1 Score and Primary Spiritual/Religious Beliefs

Ethnicity. Table 14 reports the mean and standard deviation of the participants' SIBS-R and BVS scores by ethnicity (Caucasian, Native Hawai'ian/Pacific Islander, Asian, Other).

Table 14.

Comparison of Spiritual/Religious Beliefs Scales by Ethnicity

		Mean	SD
SIBS-R Total score	Caucasian	106.87	23.37
	Native Hawai'ian/Pacific Islander	125.17	15.01
	Asian	106.68	25.71
	Other	126.09	17.09
SIBS-R Ext./Rit.	Caucasian	75.52	20.35
	Native Hawai'ian/Pacific Islander	91.06	14.18
	Asian	75.05	22.52
	Other	91.27	12.31
BVS Total score	Caucasian	50.96	22.50
	Native Hawai'ian/Pacific Islander	66.96	13.33
	Asian	57.80	16.90
	Other	67.09	10.64
BVS Factor 1	Caucasian	42.24	20.46
	Native Hawai'ian/Pacific Islander	57.19	13.12
	Asian	48.60	15.84
	Other	56.55	9.39

Using ANOVA to compare the differences between more than two groups (Field, 2009, pg 349), the SIBS-R Total scores and External/Ritual subscale scores were found to be significantly different according to ethnicity [$F(3,78) = 5.394$, $p = .002$ (Figure 19) and $F(3,79) = 5.087$, $p = .003$ (Figure 20), respectively]. Similarly, participants' ethnicity and BVS Total score [$F(3,78) = 4.438$, $p = .006$] (Figure 21), and ethnicity and Factor 1 score [$F(3,78) = 4.347$, $p = .007$] were significantly different (Figure 22).

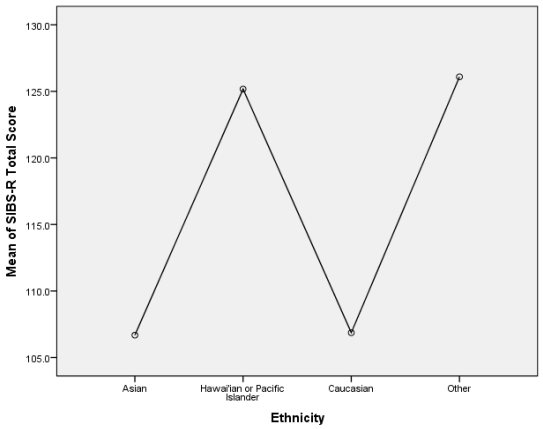


Figure 19. SIBS-R Total Scores and Ethnicity

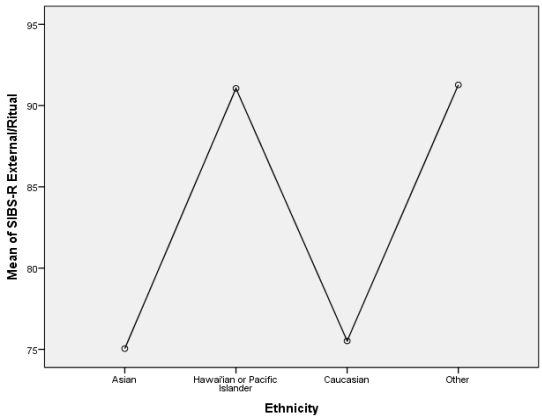


Figure 20. SIBS-R External/Ritual Scores and Ethnicity

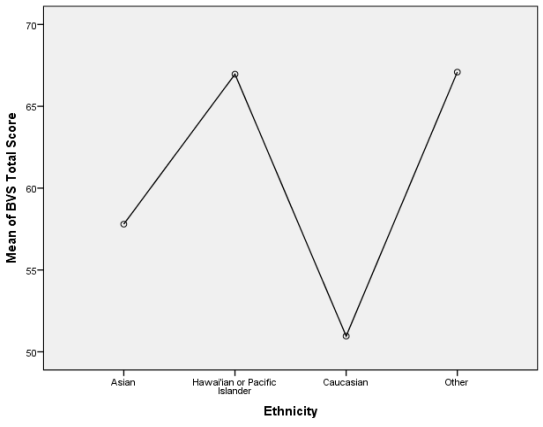


Figure 21. BVS Total Scores and Ethnicity

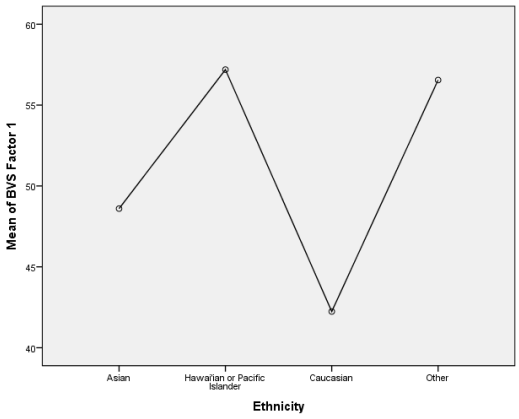


Figure 22. BVS Factor 1 Scores and Ethnicity

Chapter 5. Discussion

Rationale for the Study

Today's healthcare environment calls for holistic nursing care that incorporates patient spiritual/religious beliefs. Such care may be critical in the context of assisting patients in making resuscitation decisions, when patients face mortal decisions. The impact on patients' QoL, and the complexity of the resuscitation decision warrant additional research regarding patients' resuscitation preferences. The consequences of the resuscitation decision make it imperative that healthcare providers have an understanding of patients' spiritual/religious beliefs and how those beliefs are associated with resuscitation decisions. Research literature continues to demonstrate that spiritual/religious beliefs have numerous definitions (Unruh, Versnel, & Kerr, 2002), and there is little research to guide nurses as they endeavor to incorporate patients' spiritual/religious beliefs into resuscitation decisions. Thus, further research is essential to explore and better understand the associations between patients' spiritual/religious beliefs and resuscitation decisions.

Background of the Study

The purpose of this study was to examine the associations between spiritual/religious beliefs and resuscitation decisions in hospitalized patients. Once approved by The Queen's Medical Center's Research and Institutional Review Committee and the University of Hawai'i's Human Subjects Committee, hospital patients meeting the inclusion criteria were recruited and invited to participate in the study over an eight-week period. A convenience sample of 84 patients completed the questionnaire (56% participation rate). While maintaining patient

confidentiality, the data was described, analyzed and reported in order to examine associations between spiritual/religious beliefs and resuscitation decisions in hospitalized patients.

Interpretation of Findings

Description of participants. The majority of the participants were male (67.9%) which is similar to the QMC patient population cared for by the hospital-employed physicians. Seventy-eight percent of participants cited traditional theistic spiritual beliefs, which is significantly greater than the number reported in Hawai‘i Population (2013). This is most likely due to this study’s self-reported data collection method, as opposed to surveys and reports regarding the practice of a specific religion. The ethnicity of the sample population demonstrated no majority, which is reflective of Hawai‘i’s population as a whole. The age of the sample population reflects the range of adult patients hospitalized at QMC. The sample population’s pain level appeared to be higher than expected of patients who would be willing to participate in research. A significant majority of the participants preferred resuscitation (83%).

Test for assumptions. No participants were removed as outliers as none met the criteria of Cook’s statistics. The means did not deviate largely from medians (Table 4) even though the tests showed significant (Table 5). And the Spearman and Pearson correlations were also very similar (Tables 8 and 9). These supported that the data did not strongly deviated from a bell-shaped symmetric distribution.

Spiritual/religious beliefs scales. The SIBS-R Total scale ($\alpha = .88$) and External/Ritual subscale ($\alpha = .90$) demonstrated respectable reliability and within the range of previous studies ($\alpha = .98$ from Hatch personal communication May 30, 2013; $\alpha = .71$ Roscoe et al., 2009). The BVS Total scale ($\alpha = .96$) and Factor 1 subscale ($\alpha = .96$) demonstrated very high reliability and

similar to previous study of King et al. (2006)(α =.93).These scales and subscales demonstrated internal reliability and the scales have internal consistency when used with the study population.

Spiritual/religious beliefs and resuscitation decisions. Spiritual/religious beliefs research is often based upon a single question of primary religious preference (Sharp et al., 2012) or self-rated scale of "religiosity" (Kypriotakis et al., 2014). No previously reported study has employed two scales to measure spiritual/religious beliefs in addition to a self-selected designation of primary beliefs. Even with three measures of spiritual/religious beliefs (SIBS-R, BVS, and primary spiritual/religious belief), the findings of this study revealed no associations between spiritual/religious beliefs and resuscitation decisions in the sample recruited from hospitalized patients. These findings are consistent with Song and Hanson (2009) and Delgado-Guay et al. (2015), where intensity of spiritual/religious beliefs and practices were not found to be associated with the resuscitation decisions of dialysis or cancer patients, respectively.

However, the evidence is inconsistent and other published research has shown associations between spiritual/religious beliefs and resuscitation decisions. One study, of hospitalized patients at end-of-life by Phelps et al. (2009) identified increased use of life-prolonging care which is contrasted with the relatively healthier population recruited for this study. Another, a study of community participants by Sharp et al. (2012), examined responses to hypothetical scenarios whereas this study questioned participants in reference to reality. Finally, numerous studies report patients' assertions that spiritual beliefs influence their resuscitation decisions (Ehman et al., 1999; Gauthier, 2005; Gauthier & Swigart, 2003; Silvestri et al., 2003; Sullivan et al., 2004; Volker & Wu, 2011). Patients' assertions may not be representative of their

decisions when personally facing resuscitation decisions. The data regarding the associations between patients' spiritual/religious beliefs is inconclusive.

Other factors and resuscitation decisions. Factors such as quality of life, age, gender, medical diagnosis/co-morbidities, ADL needs, personal support, and ethnicity have been thought to influence resuscitation decisions, and there is some evidential research. Leichtentritt & Rettig (2001), Rodriguez and Young (2006), and Voogt et al. (2005) found, for example, that patients' preference for no resuscitation increases as QoL declines. Increased age was reported to increase preference for no resuscitation by Laakkonen et al. (2005), Marco and Larkin (2008), Kaldjian et al. (2009), Johnson et al. (2010), Karches et al. (2012), and Kypriotakis et al. (2014). Similarly, patients report the desire for fewer life-prolonging measures as severity of illness and disability increased, according to studies published by Carmel & Mutran (1999), Fried et al. (2007), and Kelly (2010).

This study found no significant associations between the demographic characteristics of the participants and their resuscitation decisions. These findings may be due to the small sample size of DNAR patient participants. The results may be related to the greater proportion of generally healthy patients in the sample population, as suggested by America's Health Rankings (2016). Other investigators have suggested the possibilities of patient acceptance of a poor prognosis (Frank, 2009; Gauthier, 2005) or knowledge (Allen et al., 2008) are confounding variables influencing resuscitation decisions. The evidence is inconclusive regarding other factors that may influence patients' resuscitation decisions.

Spiritual/religious beliefs assessment. This study is believed to be the first to utilize two spiritual/religious beliefs scales to examine associations between spiritual beliefs and resuscitation decisions in a hospitalized patient population.

Associations between spiritual/religious scales. Analyses using Pearson's *r* revealed significant positive correlations between the SIBS-R and BVS Total scores (0.766), and between the SIBS-R Total scores and BVS Factor 1 scores (0.756). The findings indicate as the score of one variable increases or decreases in value, the second variable similarly will increase or decrease in value. These correlations demonstrate that SIBS-R, BVS, and subscales SIBS-R External/Ritual and BVS Factor 1 may measure similar but not the same concepts of spiritual/religious beliefs. The lower correlation between SIBS-R and BVS Factor 2, and SIBS-R External/Ritual and BVS Factor 2 is expected because Factor 2 is measuring a different concept. Factor 2 measures spiritual beliefs "outside a religious context" (King et al., 2006, p. 422) and the SIBS-R measures both spiritual and religious beliefs; also, the BVS Factor 2 failed to meet the assumption of homogeneity of variance.

Gender and spiritual/religious scales. This study found significant differences in BVS Total scores according to gender. Similar to the findings of King et al., (2006, p. 420 & 423), and King et al., (2013, p. 2508) this study found females scored higher BVS total scores 65.73 (±11.54) when compared to males 57.14 (±20.21), $p<.05$. However, this study found no significant differences in SIBS-R Total scores according to gender, similar to the findings of an examination of HIV-seropositive patients by Litwinczuk and Groh (2007, p.17). This suggests each scale is consistent in measurement of gender differences.

Primary spiritual/religious beliefs and spiritual/religious scales. Consistent with existing literature on the development of these scales, participants with traditional theistic beliefs had much higher average SIBS-R Total (Hatch et al., 1998) and BVS Total scores (King et al., 2006, p. 424; King et al., 2013, p. 2508). No existing literature was found reporting the relationship between spiritual/religious beliefs and SIBS-R External/Ritual scores or BVS Factor 1 scores. Analysis revealed the SIBS-R and BVS scales and SIBS-R External/Ritual and BVS Factor 1 subscales offer a high degree of specificity, which facilitates discernment between traditional theistic beliefs and non-theistic beliefs. This study supports the use of the SIBS-R and BVS scales to assist in determining strength of spiritual/religious beliefs.

Ethnicity and spiritual/religious scales. This study found significant differences between SIBS-R Total, SIBS-R External/Ritual, BVS Total, and BVS Factor 1 scores according to ethnicity. Asian and Caucasian participants reported significantly lower spirituality scores compared to the Native Hawai‘ian/Pacific Islanders and “Other” ethnic groups. This suggests that Native Hawai‘ian/Pacific Islanders have a higher level of spiritual/religious beliefs. This is in line with other studies which have found that Native Hawai‘ian/Pacific Islanders have high levels of religiosity (Smith & Hung, 2012) and strong indigenous spiritual beliefs (McLaughlin & Braun, 1998). The “Other” group was too mixed and too small a sample to make any assumptions about why the group’s spiritual/religious beliefs score were significantly higher than the Asian and Caucasian participants, but it may be that these patients are also mixed in their beliefs including both traditional theistic and indigenous spiritual beliefs . There is not literature that represents the use of either of these two scales with this particular ethnic population mix. The ethnicities from previous studies using the BVS were “White,” “Black,” “South Asian,”

"Chinese," and "Other" (King et al., 2006, p. 420 & 423), and "White," "Black," and "Other," (King et al., 2013, p. 2508) and demonstrated significant differences in scores according to ethnicity.

Incidental Findings

Two potentially significant observations unrelated to this study's primary aims warrant mention. First, this study population had a surprisingly high pain rating (average 5.3) considering the patients' function levels. The medical diagnosis/co-morbidities of the patient population does not reflect a large number hospitalized for painful conditions. This higher pain rating may, then, be related to the placement of the question between the two spiritual/religious scales. Patients may have been rating their spiritual pain or overall suffering instead of only their physical pain. (Yet, both spiritual and physical pain may be associated with a patient's resuscitation decision.) A second significant finding indicated 20% of the sample participants requested one, but not both, of the resuscitation interventions (chest compressions or intubation). Since resuscitation would most likely require both chest compressions and intubation to be successful, these patient responses may reveal a lack of understanding about resuscitation measures, similar to the findings of Kaldjian, et al. (2009).

Study Limitations

Three potential limitations to this study were identified. First, the sample population appears healthier (for a hospitalized population) than anticipated. This may have been due to higher self-refusal rates among patients who were more ill, due to the relatively high cognitive functioning required to score ≥26 on the MoCA, and/or due to nurses screening out more ill patients. In future research, a greater tolerance for less cognitive functioning may be warranted.

Second, the order effect of the pain rating question between the two spiritual/religious beliefs scales may have influenced patients' responses. In future research, the pain rating should be moved to the demographic section of the questionnaire (or it could be retrieved from electronic data). Finally, the ethnicity group "Other" may have been too "mixed" and too few in number to analyze. In future research, a larger sample size may allow for analysis of additional ethnic groups.

Study Strengths

This study is very timely as healthcare moves to a culture focused on health and having resuscitation discussions when patients are healthier. The strengths of this study are specific to the limits of previous research. First, there is a paucity of data regarding the spiritual/religious beliefs of hospitalized patients. This study adds to that body of knowledge with regard to the influence of spiritual/religious beliefs on resuscitation decisions, and also with regard to spiritual/religious beliefs scales in measuring spirituality. Second, this study represents a population of mixed ethnicity wherein the majority of the participants were not Caucasian. In addition, the participants represented both traditional theistic and non-traditional beliefs, whereas the majority of research in spiritual/religious beliefs examines a population solely with traditional theistic beliefs (Koenig, 2011).

Implications for Future Research

In addition to the recommendations noted under Study Limitations, three specific considerations should be addressed in future studies. First, a larger sample size is desirable in order to allow the numerous ethnicities that made up the "Asian" group to be individually identified. A larger sample size may also result in a larger number of patients requesting DNAR

for further comparison. Second, future research should address the complexity of the resuscitation decision, including individual factors such as patient understanding of medical interventions and anticipated prognosis, and influencing factors regarding cultural collectivist decision-making, and acculturation. Finally, the wide range of factors that appear to influence resuscitation decisions suggests a deeper understanding may be possible with the evaluation of even more demographic variables, such as total length of stay, status at discharge, accurate reflection of comorbidities, insurance, and total hospital charges/cost during hospitalization.

Implications for Practice

This study brought to light several implications for clinicians. First, although a small number of research articles say there is no association between patients' spiritual/religious beliefs and their resuscitation decisions and numerous others indicate there is an association, the data as a whole is inconclusive and clinicians should not assume any association between patients' primary spiritual/religious beliefs and their resuscitation decisions. In addition, prior to asking resuscitation questions, clinicians should confirm a patient's understanding of medical terms such as intubation, chest compressions, and understanding of medical condition and personal anticipated prognosis, and should readdress the resuscitation decision as a patient's health changes.

Conclusion

Although no associations between resuscitation decisions and spiritual/religious beliefs were found in this study of hospitalized patients, spiritual/religious beliefs scales were shown to offer an effective measure of the level of spiritual beliefs. In addition, differences in spiritual/religious beliefs according to ethnicity were found, suggesting the importance of further

study with a larger sample population. Further research should address the complexity of the resuscitation decision, including individual factors such as patient understanding of medical interventions and anticipated prognosis, and influencing factors regarding cultural collectivist decision-making and acculturation. In the interim, this study calls for an individualized approach to assisting patients in determining their resuscitation decisions.

Appendix A

Pragmatic Utility Method – Review of Articles

Article	**Patient Population (*n*)**	**Religion (*n*)**	**Method of Analysis**	**Definitions/Findings**	**Model**
Alcorn et al. (2010)	US: 68	Catholic: 32 Christian: 22 Jewish: 5 Other: 9	Grounded theory.	Coping: extending longevity, potential cure, strength, meaning, comfort, acceptance, and emotional stability; practices; beliefs; transformation; and community.	Nurses
Chao et al. (2002)	Taiwan: 6	Buddhist: 4 Christian: 2	Hermeneutic: interviewed 3-6x.	4 constitutive patterns & 10 themes.	Nurses
Chio et al. (2007)	Taiwan: 21	Not religious: 1 Buddhism: 4 Taoism: 5 'Yit-Kuan Tao': 5 Folk religion: 4 Christian: 3	Phenomenological -hermeneutic.	3 "Plots": (1) Rely on self: Passive attitudes towards life meanings; (2) Rely on others: Feeling a fear of death, sense of being protected through practicing religious worship; (3) Rely on self and others: feeling released through patients practicing beliefs of letting go and living in the moment, gaining positive view of life meanings through searching for religious and other explanations, being self-transcendent through helping other cancer patients (p. 738).	MHT
Egan et al. (2011)	New Zealand: 24	Christian: 12 Non-Affiliates: 7	Responses grouped into three areas.	Religion-faith & hope. Existential or humanistic-values & beliefs, inner well-being.	Nurses
Elliot et al. (2012)	US: 20	Not identified.	Coding done by 3 investigators and then computer software.	Medical care a gift from god, beliefs after death: heaven, meaning, religious practices, community support.	MHT
Hall (1998)	US: 10, European: 6, Mexican: 2, African: 1, Native: 1	Not identified.	Interpretive interactionism and participant review.	Purpose in life emerges from stigmatization. Opportunities for meaning arise from disease without a cure. After suffering, spirituality frames life (p.146).	Nurses

Pragmatic Utility Method – Review of Articles, Continued

Article	**Patient Population (*n*)**	**Religion (*n*)**	**Method of Analysis**	**Definitions/Findings**	**Model**
Hanson et al. (2008)	US: 38	Protestant: 29 Catholic: 3 Other: 1 None/Agnostic: 1 Missing: 2	Open-ended question or inventory.	Relationship, Understanding, Coping, Practices	Nurses
Herman (2001)	US: 19, Caucasian: 14	Protestant	Described but not defined.	"God" but progressed to total existence: peace & nature.	MHT
Kawa et al. (2003)	Japan: 11	Nationally atheistic with "personal religion".	Team approach.	Physical symptoms, feelings, relationships, and death itself.	Theologians
Koffman et al. (2008)	South London: 45 (Black Caribbean: 26, White British: 19)	Christian	Framework analysis	"Attitude toward life and relationship with others".	MHT
Mako et al. (2006)	US: 57	Catholic: 31 Protestant: 17 Jewish: 5 Muslim: 3 Hindu: 1	Spiritual pain in terms of three dimensions of spiritual struggles.	Nearly half spiritual pain in intra-psychic terms (e.g., suffering with despair, loss, regret, or anxiety), 38% expressed their spiritual pain in relation to the divine and 13% to the interpersonal dimension.	Nurses
McGrath (2003)	Australia: 14	No specific: 8	Computer analysis	Religion, "eclectic composite of a range of beliefs: emotions, search for meaning".	Nurses
Mok et al. (2010)	Hong Kong; Chinese: 15	Christian: 7 Buddhist: 3 No religion: 5	Interpretive phenomenology	Unique personal belief that gives meaning to life through relationships and fulfilled responsibilities.	Nurses

Pragmatic Utility Method – Review of Articles, Continued

Article	**Patient Population (*n*)**	**Religion (*n*)**	**Method of Analysis**	**Definitions/Findings**	**Model**
Murray (2007)	United Kingdom: 48 patients: 24 cancer & 24 heart disease	Not identified.	Longitudinal: only used terminal or end-of-life information reported.	CA: an acceptance of death was sometimes apparent. Some worried if they had been good enough during their life, if there was an afterlife, and feared death. Others felt confident in their faith, knowing that death was a transition rather than the end. (p. 398) Heart: Illness and suffering was sometimes associated with positive aspects, such as love, hope, trust, and forgiveness. While some were supported and comforted by their religious beliefs, others wondered about judgment or divine indifference. (p.399)	Nurses
Norum et al. (2000)	Norway: 20	Lutheran Norwegian Humanisticall y ethical association Jehovah's Witness	Pilot study. Summary of brief notes.	Belief in God. Use of prayer/seeing priest.	Healthcare Providers
Penman, Oliver & Harrington (2009)	South Australia: 4	Catholic & Protestant	Hermeneutic phenomenology.	"God, coping, religion, relationship with others, and love"	Nurses
Shih et al. (2008)	Taiwan: 30	Not identified.	Exploratory.	Needs were identified: (1) Reassurance about the physical discomfort and possible failure of HT surgery (PS and PDS); (2) Consultation to meet unfulfilled family responsibilities (PS and PDS); (3) Accomplishing personal life goals (PS and PDS); (4) Providing religious support in critical health situations (PS and PDS); (5) Establishing confidence in body image during postoperative sub-acute stage (PDS); (6) Establishing a positive relationship between the subject and their SOs (PS and PDS); and (7) Preparation for dying with dignity when necessary (PS and PDS).	Healthcare Providers

Pragmatic Utility Method – Review of Articles, Continued

Article	**Patient Population (*n*)**	**Religion (*n*)**	**Method of Analysis**	**Definitions/Findings**	**Model**
Stephenson et al. (2003)	US: 6	Protestant	Team approach	Confirmed definition: meaning, beliefs (value), transcendence, connecting, & becoming; "who's in charge" & "connecting"	Healthcare Providers

Appendix B

Literature Review – Summary of Articles

Article/ Book	**Patient Population (*n*)**	**Purpose**	**Method of Analysis**	**Findings**	**Limitations**
Allen et al., 2008	81 adults, Two-group (enhanced information; no information) between-subjects design. Community-based dwellings, two assisted living facilities, and one senior citizen center.	To examine the effect of enhanced information regarding the risks, benefits, and life-sustaining treatment alternatives on hypothetical medical decisions and decisional conflict in older, community-dwelling Caucasian and African-American adults.	Life Support Preferences/Predictions Questionnaire-modified (LSPQ- m); the Decisional Conflict Scale. A mixed ANOVA was used to explore the effects of race, group, illness, treatment, and all possible interactions on desire for life-sustaining treatment.	A mixed analysis of variance with group and race as between-subjects variables and illness and treatment as within-subjects variables revealed significant main effects of race, illness, and treatment, as well as a significant race-by-illness-by-group interaction (Wilk's lambda = .923, F(2, 73) = 3.05, P =.05, partial n^2 = .08). Regardless of race, individuals were more likely to desire CPR, feeding tubes, and mechanical ventilation within the context of emphysema (M=.92 ± .14) than cancer with constant pain (M=1.45 ±.14). Across illness contexts, participants were least likely to desire mechanical ventilation (M=1.40 ±.15). Enhanced information produced different patterns of desire for life-sustaining treatments in African Americans (decreased in emphysema group) and Caucasians (increased).	Small sample of 78 community-dwelling older adults, few men in the enhanced-information educated community-dwelling older adults and individuals residing in assisted living facilities. Use of vignettes vs. personal preferences at the time.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Barry & Henderson 1996	7 patients, At least five interviews were conducted with each patient.	To explore the degree to which "incurable" oncology patients desire participation in decision-making with respect to treatment modalities and to ascertain whether these patients perceived that they were able to enjoy this desired participation.	Longitudinal approach. Series of interviews during terminally ill oncology patients' repeated admissions to hospital. A picture-card tool was employed during these conversations as an objective measure of the patient's response.	There was consistency between patients' preferred and actual forms of decision-making when they were initially admitted to hospital; discrepancies became apparent during the later phases of their illness (the desire to be more active in decision-making actually increased with the progress of the disease).	Small *N*
Belanger, Rodriguez, & Groleau, 2011	37 articles for analysis	To synthesize knowledge about the process of shared decision-making (SDM) in palliative care.	Four major health-related databases: Medline, EMBASE, CINAHL, and PsychInfo. Snowballed and hand search of 9 journals. QUORUM flowchart	A majority of patients want to participate in treatment decisions to some extent, most do not achieve their preferred levels of involvement because decisions are delayed and alternative treatment options are seldom discussed.	Limited information on sample selection in the literature. Information on referral processes to palliative care is scarce-authors not contacted, challenge of integrating qualitative & quantitative research. Did not use end-of-life in search term.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Blanchard, et al., 1988	439 interactions between hospitalized adult cancer patients and oncologists	To investigate patient preferences for a participatory role in the interaction.	Interview	Majority (92%) preferred all information be given, but only 69% preferred to participate in therapeutic decisions. Of those wanting all the information, 24.9% preferred the physician to make the therapeutic decisions. This group was comprised primarily of older, sicker males.	
Boscaglia, Clarke, Jobling, & Quinn, 2005	One hundred patients from outpatient GC clinics at two Melbourne-based hospitals.	To determine whether, after accounting for illness and demographic variables, spiritual involvement and beliefs and positive and negative spiritual coping could account for any of the variation in anxiety and depression among women within 1 year's diagnosis of gynecological cancer.	A brief structured interview and self-report measures of anxiety, depression, spirituality, and spiritual coping. Using two sequential regression analyses.	Younger women with more advanced disease, who used more negative spiritual coping, had a greater tendency towards depression and the use of negative spiritual coping was associated with greater anxiety scores.	Cross-sectional design, the lack of consideration of other variables that may predict mood.
Brady, Peterman, Fitchett, Mo, & Cella, 1999	Large (n=1,610) and ethnically diverse. 4 sites in US and 2 in Puerto Rico.	(1) Does spirituality demonstrate a positive association with QoL? (2) Is this association unique? (3) Is there clinical utility in including spirituality in QoL measurement?	Measured by the Functional Assessment of Chronic Illness Therapy—Spiritual Well-Being (FACIT-Sp), the Faith subscale was trichotomized. One-way ANOVAs were used for continuous variables.	Spirituality was found to be associated with QoL to the same degree as physical well-being. Spiritual well-being was found to be related to the ability to enjoy life even in the midst of symptoms, making this domain a potentially important clinical target.	Positive skewness of the Faith subscale measuring QoL with well-being scale.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Bregman, 2006	Historical review of term.	To examine the remarkable popularity of the term "spirituality" and its proliferating definitions.	Theologian	History of nursing and shifted way from faith: 93 definitions.	Method of literature review not described.
Brown, Tonigan, Pavlik, Kosten, & Volk, 2013	US: 91 subjects (alcohol or drugs) from 10 different Celebrate Recovery sites in community churches	To determine whether self-efficacy is associated with spirituality within a religious 12-step program.	Spiritual Involvement and Beliefs Scale Logistic regression analysis (selected P < 0.20 as the cutoff for inclusion of a variable into the model).	Mean spirituality score for those with high confidence was significantly greater than those with low confidence. Spirituality associated with greater confidence to resist substance use (OR = 1.09, 95% CI 1.02–1.17, P < 0.05). Every unit increase of measured spirituality increased the odds of being above the median in self-efficacy by 9%	Cross- sectional design, small sample from the Southwest.
Bulow et al., 2008		To describe the world's major religions' standings on withholding and withdrawing of therapy, on hastening of the death process when providing pain relief and euthanasia.	Literature research and a description of the legislature in countries where religious rulings do influence secular law.	Patient autonomy in the Western (Christian) world is not necessarily an issue among other ethnic and religious groups.	Literature review not described.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Cadell, Regehr, & Hemsworth, 2003	Canada: 174 bereaved HIV/AIDS caregivers	To explore factors that allow growth to occur after a trauma.	Spiritual Involvement and Beliefs Scale	Spirituality had a significant direct positive effect on Posttraumatic Growth ($y1–1 = 0.06$), $t = 1.90$, $p < .05$ (one-tailed). Spirituality, social support, and stressors were found to have a positive relationship with growth.	Cross-sectional design: self-selection bias, small number of participants, no ethno cultural background of subjects. Lack of religious data.
Carey & Cosgrove, 2006		To highlight cultural and religious issues surrounding death in the intensive care unit.		5 major faiths in UK end-of-life generalizations described: Buddhism, Hindu, Islam, Judaism, and Sikhism.	Literature review not described.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Carmel & Mutran, 1999	1994: 1,138 1995: 802 1996: 638	To assess the stability of expressed preferences for the use of life-sustaining treatments (LST) in severe illness conditions over two years.	Longitudinal study. The Jewish Religiosity Scale (JRS) is structured according to three dimensions: general belief, religious practice, and religious social influence.	Factors that influenced change in end of life wishes: more religious were less stable in their decisions over time, those who wanted more over time: less physical and social resources/gender, ethnic origin, education, marital status, religiosity, self-rated health, activities of daily living, social support, and immigration status. The results of these univariate analyses showed that those with stable preferences differed significantly from the two unstable groups: they had higher education, better health status, were less religious and had a stronger fear of dying. Severely ill more likely want less aggressive over time.	Unable to evaluate the attitudes of dropouts in 1995 and 1996.
Conner, 2012	US: 104 terminally ill Black men and women recruited from 6 inpatient and outpatient settings	To examine the differential ability of demographic variables, beliefs, and values about end-of-life, spirituality, and social relationships to predict hospice use among Blacks.	Behavioral Model of Health Services Use. Spirituality was measured by the 22-item Spiritual Involvement and Beliefs Scale. Chi-square, sequential, and stepwise logistic regressions.	The best predictive model consisted of presence of a caregiver, having a religious affiliation, and male gender. Together these factors predicted 13.7% to 19% of hospice use among Blacks.	MD referral for hospice may be a bias to those eligible for the study.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Drought & Koenig, 2002	US: 88 palliative outpatients, HIV & Cancer and +1-3 family/friends who supported patient.	To explore contribution of bioethics to clinical care at the end of life (EOL).	Longitudinal Interview	No discussion AD: 73%, 51% not discussed limiting treatments, 56% no DNAR orders. a) Prognostication at EOL is problematic and resisted; (b) Shared decision making is illusory, patients often resist advance care planning and hold other values more important than autonomy, and system characteristics are more determinative of EOL care than patient preferences; and (c) The incommensurability of medical and lay knowledge and values and the multifaceted and processual nature of patient and family decision-making are at odds with the current EOL approach toward advance care planning. Some patients want MD to decide medical plan: specific data not available.	Researchers did not discuss limits of study, mostly providers were informing vs. patients.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Ehman, Ott, Short, Ciampa, & Hansen-Flaschen, 1999	177 U of Penn: pulmonary outpatients	To answer the question: "Do you have spiritual or religious beliefs that would influence your medical decisions if you became gravely ill?"	Quantitative 6 questions: piloted for readability and comprehension. Retested 2-4 weeks apart.	51% religious. 90% believed prayer sometimes influenced recovery. 45% reported religious beliefs would influence medical decisions if they became gravely ill. (4 key questions) with correlation coefficient exceeded 0.7 ($P < .001$).	Not all religions represented. Patients may answer differently when they are gravely ill. Number approached was not identified.
Flannelly, Galek, Tannenbaum, & Handzo, 2007	Process of scale development	To develop a scale for measuring the effectiveness of pastoral care with family members.	Medline search of satisfaction tools. Tool developed and convenience sample of chaplains judged the usefulness of each of the scale items, for evaluating chaplains' effectiveness.	Outcome-oriented measure of effectiveness compared to typical family satisfaction instruments.	Tested with chaplains vs. patients/families.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Frank, 2009	18 qualitative published papers between 1997-2007	To identify the extent to which shared decision-making currently exists during end of life care in the acute/hospice setting. Particular attention is paid to patient participation, the nurse's role, and the doctor/nurse relationship – factors that may facilitate or prevent shared decision-making.	Literature review.	Lit review: 8 articles: recognition and acceptance of prognosis, strong faith or spirituality, sense of well-being, and good coping techniques. Shared decision-making is difficult to achieve, several factors prevent patients from participating, nurses have a key role in decision-making, conflicts between doctors and nurse can get in the way. Not only poor prognosis but patients' acceptance was required for changes in code status to DNAR.	Limited number of articles.
Fried et al., 2007	US: 226 community-dwelling persons with advanced cancer, congestive heart failure, or chronic obstructive pulmonary disease.	To examine changes in treatment preferences over time.	Face-to-face interviews every 4 months for 2-year longitudinal study.	Greater functional disability, poorer quality of life, and lower self-rated life expectancy were associated with decreased willingness to undergo therapy.	Primarily Caucasian, missing data for those who died or dropped out. 3 of the sites requested to participate refused (12%)
Galek, Flannelly, Vane, & Galek, 2005		To describe the development of a multidimensional tool to assess spiritual needs.		Belonging, meaning, hope, the sacred, morality, beauty, resolution, deeper acceptance of dying	

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Gauthier & Swigart, 2003 Gauthier, 2005	US: 14 hospice patients, 13 cancer & 1 CHF	To describe the process of decision-making for adults with terminal illness.	Qualitative Grounded Theory Two open-ended research questions.	Terminally ill make decisions in the context of realizing terminality, accommodating living, and engaging uncertainty.	None identified by researcher. Conclusion of study didn't appear in the data.
Hatch et al., 1998	US: 50 family practice patients and 33 family practice educators	To develop an instrument to assess spiritual actions and beliefs.	Tool development. Compared to Spiritual Well-being Scale.	High internal consistency (Cronbach's alpha = .92, test-retest reliability of r = .92, four factor structure).	Small, not diverse sample.
Hermann, 2006	US: 100 hospice patients	To develop and test an instrument to measure the spiritual needs of patients near the end of life.	Maslow's (1970) theory of motivation guided development.	Describes other spirituality tools. The Spiritual Needs Inventory (SNI) is a valid and reliable measurement of spiritual needs of patients near the end of life.	Some interviews took place in the presence of others. SNI was read by the investigator to subjects as they viewed the tool.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Holloway, Adamson, McSherry, & Swinton, 2011	Systematic review of the literature: 2000-2010	To gather systematic evidence of the knowledge and tools available to promote and support the delivery of high quality spiritual care appropriate to the diverse contexts of end of life care in the UK, as well as to identify gaps in knowledge and skills and practice issues.	248 sources were identified, classified and critically reviewed. The documents were written by authors from 17 different countries although the UK and US accounted for 41% and 35%, respectively. There were 7 collaborative publications across two countries.	History and development of nursing. 10 recommendations. -We would not advocate a continuing search for a single definition of spirituality. -We are not advocating a 'one size fits all' model but a clear framework, underpinned by established theory, within which practitioners can locate their own. -We recommend that work be undertaken to define spiritual care outcomes appropriate to good end of life care professional orientation and work context. -Further research is necessary exploring the role of spiritual support in end of life care with diverse ethnic and religious groups.	No limitations noted by authors.
Hunt, Cobb, Keeley, & Ahmedzai, 2003	Consensus process in the setting of a multidisciplinary team	To develop a quality standard for the assessment, delivery and evaluation of spiritual care.	Donabedian framework of Structure-Process-Outcome. Trent Hospice Audit Group-staff who published "Palliative Care Core Standards – A Multidisciplinary Approach.	3 levels of assessment defined and the skills needed for these assessments identified.	Literature review process not described.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Hyland, Geraghty, Joy, & Turner, 2006	97 university undergrads and 19 staff	To determine whether absorption and spirituality predict the placebo response independently of expectancy.	One month after the start of treatment, participants responded to an email inquiry about symptom change using a single seven-point change scale. SIBS-R	Spirituality and absorption together predicted additional variance compared with a cluster of expectancy measures comprising expectancy, attitude to complementary medicine, and holistic beliefs (increment in R2=.042, P =.032), and spirituality alone (but not absorption alone) predicted more additional variance than did the expectancy cluster (increment in R2=.043, P=.014).	Lack of clarity of definition of spirituality, outcome measure was crude. No control group.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Hyland, Whalley, & Geraghty, 2007	Study 1: 167 people Study 2: 90	To test a motivational interpretation of placebo responding using two different types of placebo therapy, one using flower essences and the other a nonspecific psychological therapy.	Study 1 was a replication of an earlier flower essence outcome study and additional outcome and predictor variables: questionnaires in return for free flower essence treatment. Predictor variables two measures of spirituality (SIBS-R & SCQ-48), optimism, expectancy, and attitudes and beliefs to complementary medicine. Outcome was assessed after 3 weeks. In Study 2, part in "gratitude therapy" for improved sleep quality over one night in return for questionnaire completion (trait gratitude spirituality, and expectancy).	Study 1 confirmed previous research: Trait spirituality predicted perceived improvement. This improvement was independent of optimism (Pb.001), cannot be explained by acquiescence or social desirability, and was independent of a highly conservative test of expectancy (P=.02). In Study 2, trait gratitude predicted perceived sleep improvement independently of expectancy (P=.01): Spirituality did not correlate with improvement.	Limitations not discussed.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Ireland, 2010	UK	To reflect on a case study of a patient receiving palliative care who was a nurse from Africa.	Case study using Taylo (2005) reflective model.	Spiritual distress: in the clinical setting- 'what is spirituality?' How this is expressed is a dynamic process, and cannot necessarily be captured by a one-off question and answer session.	Case study.
Jaul, Zabari, & Brodsky, 2014	Jerusalem: 46 family-member caregivers of non-communicative patients	To determine whether assessing the spiritual background influences medical decision-making regarding the use of DNAR.	Interview using the FICA (faith, importance, community and addressing). Only four of the questions were used. Chi-square and t-test, multivariable logistic regression analysis.	Two-thirds of the families were opposed to a determination utilizing DNAR. Multivariate analysis of the findings found that only religious affiliation was statistically significant ($p = 0.003$). The doctors recommend DNAR in 67% of the cases while the family caregiver accepted this decision in only 33% of the cases.	Used term "futile" vs. medically ineffective. Not clear if the interview of the surrogate happened before or after the family meeting and if the treating MD was aware of the results.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Johnson et al., 2010	US: 1072 patients died in CCU	To examine factors associated with patients' choices for level of care at the end of life.	Prospective closed chart review. Univariate analysis of variable association with the full code status was first conducted to identify those variables that were significantly related to full code status, without controlling for others; a multivariate model, the factors significantly associated with full code status.	Age and LOS significant-as increased so did likelihood of DNAR. Full code: 41.8% (n = 112) of Blacks versus 26.7% (n = 194) of Whites, (P <.001). Do not resuscitate: 37.3% (n = 96) of Blacks versus 43.9% (n = 317) of Whites, (P = .03); withdrawal of life support: 20.9% (n = 54) of Blacks versus 29.3% (n = 210) of Whites, (P = .005). Age, sex, diagnosis, and LOS in ICU and hospital controlled for, Blacks were more likely than Whites to choose full code status at the time of death (odds ratio 1.91 [95% CI, 2.63–1.39], P < .001) (p. 335).	Cardiac Intensive Care Unit, southeastern US, socioeconomic and education variables not collected.
Joshanloo, 2011	Tehran 292 Shiite undergrads	To examine the relationship between spirituality and religiousness and a rather comprehensive set of well-being scales in an Iranian Muslim sample.	Spiritual Involvement and Beliefs Scale-Revised. Santa Clara Strength of Religious Faith. Multiple Regression Analyses. Hierarchical Regression Analyses.	Bivariate correlation analysis showed that all aspects of hedonic and eudemonic well-being were positively correlated with all aspects of spirituality and religiousness. Spirituality was a significant predictor of well-being. Religiousness did not add significantly to the prediction of well-being over and above the contribution of gender and spirituality.	Sample was similar in age, no socioeconomic data was collected. Complete in class-sample possible bias regarding anonymity.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Kaldjian et al., 2009	US: 135 adults were interviewed within 48 hours of admission to a general medical service in an academic medical center.	To investigate patients' resuscitation preferences, knowledge of CPR and goals of care.	Approx. 30 min interview with set questions. Frequency, x^2 ^{2} and analysis of variance.	Most patients believed it was helpful to discuss goals of care (n=95; 70.4%) and the chances of surviving in hospital CPR (n=112; 83.0%). Some patients expressed a desire to change their code status after receiving information about survival following in hospital CPR (n=11; 8.1%) or after discussing goals of care (n=2; 1.5%). Older more likely preferring DNAR.	Lack of patients with cancer and heart disease, little racial and ethnic diversity, did not assess for changes in patients' code status, more pessimistic in outcomes data.
Karches et al., 2012	US: 8,308 hospitalized	To examine whether end-of-life practices are associated with measures of religiosity and spirituality.	Quantitative. 3 questions on religiosity & spirituality-validated. General Social Survey & large survey of physicians.	White patients were more likely than African American patients to have an advance directive (OR 2.1; 95% CI 1.1-4.0) and a DNAR order (OR 1.7; 95% CI 1.0-2.9). High spirituality likely to have specified a decision-maker than those reporting with low spirituality (OR 1.3; 95% CI 1.1e1.5). Older more likely DNAR.	No data on religious denominations. Religiosity and spirituality questions-not valid.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Kashdan & Nezlek, 2012	87 college students for course credit, combined total of 1,239 days	To describe within-person variability in spirituality.	Initial: 22-item Spiritual Involvement and Beliefs Scale Daily: 15-item Core Spirituality subscale.	Within-person relationships between daily spirituality and self-esteem and meaning in life were stronger for people higher in trait spirituality. Lagged analyses found positive relationships between present day spirituality and next day's meaning in life; there was no evidence for meaning in life as a predictor of the next day's spirituality. When focusing on affect, for people higher in trait spirituality, greater negative effect (and lower positive effect) predicted greater spirituality the next day.	College student population, small sample of atheists, only small part of spirituality assessed daily. Sample population not patients.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Kelley, et al., 2010	147 Latino Americans elders: of them 47% never discussed with family or HCP	To measure end-of-life (EOL) care preferences and advance care planning (ACP) in older Latinos and to examine the relationship between culture-based attitudes and extent of ACP.	Cross-sectional interview. Randomly selected.	Patients keep end of life wishes to themselves. 84% of participants would prefer medical care focused on comfort rather than care focused on extending life, yet 47% had never discussed such preferences with their family or doctor, and 77% had no advance directive. Most participants favored family- centered decision-making (64%) and limited patient autonomy (63%). /EOL care preferences, extent of ACP, attitudes regarding patient autonomy, family-centered decision-making, trust in healthcare providers, and health and socio-demographic characteristics/Attitudes Toward Life-Sustaining Treatments, acculturation, depression/Attitudes Toward Life-Sustaining Treatments, Marin Short Acculturation Scale, Geriatric depression scale.	Cross-section design, low acculturation of subjects.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
King, et al., 2006	39 qualitative, 372 took 47-item, 284 took 24-item	To develop a standardized measure of spirituality for use in clinical research.	Qualitative and quantitative.	20-item questionnaire performed with high test–retest and internal reliability and measures spirituality across a broad religious and non-religious perspective.	Of the 20 questions only 3 measure spirituality.
King & Koenig, 2009	Review	To 1) Provide a brief overview of critical thinking that might form the basis for a useful definition of spirituality for research and clinical work and 2) Demystify the language of spirituality for clinical practice and research.		Define spirituality and the 4 components.	Limitation of space, authors are Caucasian-male Christians. Literature review process not described.
Koenig, 2011	Spirituality & Health Research book with many studies				

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Kristeller, Rhodes, Cripe, & Sheets, 2005	118 consecutive patients of 4 oncologist-hematologists	To evaluate acceptability, impact on satisfaction with care and on QoL of a brief (5-7 minute) semi-structured exploration of spiritual/religious concern.	FACT-G QoL and FACIT-Sp (Spiritual Well-Being) Scales; BSI Depression Scale; the PCAS Interpersonal and Communication scales; and ratings of acceptability.	Oncologists rated themselves as comfortable during the inquiry with 85% of patients. Of patients, 76% felt the inquiry was "somewhat" to "very" useful. At 3 weeks, the intervention group had greater reductions in depressive symptoms ($F = 7.57$, $p < .01$), more improvement in QoL ($F = 4.04$, $p < .05$), and an improved sense of interpersonal caring from their physician ($F = 4.79$, $p < .05$) relative to control patients. Effects on QoL remained after adjusting for other variables, including relationship to physician. Improvement on Functional Well-being was accounted for primarily by patients lower on baseline spiritual well-being (beta = .293, $p < .001$).	Not random and MD not blinded to the intervention.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Kypriotakis et al., 2014	US: 67 Black and 129 White patients	To examine the relationship between races, religiousness, spiritual well-being, antitumor treatment and preference for aggressive care among Black and White patients with advanced stage lung cancer receiving ambulatory cancer care in an urban setting.	Longitudinal Study. Scripted interview questions. Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Scale (FACIT-SP; range 0–48). Chi square and t tests.	Regression analysis for CPR showed that race was not associated with preference for CPR (OR = 1.12, CI 0.44–2.85). The odds of choosing CPR were three times higher among patients receiving antitumor treatment (OR= 3.26, CI 1.12–9.44). Greater willingness to endure adverse health states was associated with higher spiritual well-being scores (b =0.12, CI 0.01–0.25). Choosing goals to extend life versus relieve pain was higher among persons with higher spiritual well-being as well (RRR = 1.08, CI 1.01–1.16), yet the relationship with religiousness was negative (RRR = 0.46, CI 0.22–0.98). Older participants less likely to want CPR	Small sample of Blacks, patients only advanced lung cancer, mostly males. Cross-sectional.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Laakkonen et al., 2005	220 elderly home-dwelling cardiovascular patients	To investigate older patients' reasoning for their cardiopulmonary resuscitation (CPR) preferences and the related decision-making process (DMP).	Part of the Drugs and Evidence Based Medicine in the Elderly Study. "If you – in your current health situation – suddenly became ill and had a heart arrest, would you prefer to be resuscitated?" (yes/no).	Resuscitation preferences were associated with several patient characteristics, such as age, mood and quality of life. Patients preferring CPR (114/220, 52%) estimated their prognosis of CPR to be better than those preferring to forgo CPR. (81%). Participants preferring to forgo CPR (106/220, 48%). Only 9% of patients had discussed, and 38% would like to discuss, preferences for life-sustaining treatments with their physician. However, 80% of respondents felt that the patients should take some part in the DMP; either alone (9%), together with a physician (23%), or together with a physician and a close relative (48%).	Participants with cognitive impairment were excluded; excluded were older and more often depressed, only patients with vascular diseases participating in a prevention study. Bias to participants in a prevention study.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Langman & Chung, 2013	UK: 81 recovery from drug and alcohol addiction and control of 83 with no addictions	To analyze the relationships between forgiveness, spirituality, guilt, posttraumatic stress (PTSD) and psychological co-morbidity among people in recovery from addiction.	Posttraumatic Stress Diagnostic Scale (PDS), the General Health Questionnaire-28 (GHQ- 28), the Spiritual Involvement and Beliefs Scale (SIBS), the Heartland Forgiveness Scale (HFS), the Traumatic Guilt Inventory (TGI), the Michigan Alcoholism Screening Test (MAST-22) and the Drug Abuse Screening Test (DAST-20).	People with drug and alcohol addiction tend to have experienced significant past trauma and PTSD symptoms. Their posttraumatic stress reactions and associated psychological difficulties can be better understood in the light of guilt and spirituality.	Cross-section, participants were recruited from rehabilitation and drop-in centres with treatment programs for addiction.
Leichtentritt & Rettig, 2001	19 elder Israelis/47 participants elders and their family members	To reveal the values that would receive priority attention when considering end-of-life decisions/ communitarian philosophy.	Hermeneutic phenomenological.	Life domains: competence, integrity, loyalty, and legacy. Physical-biological domain: competence. Social-psychological domain: terminal personal values, familial loyalty and respect, and devotion. Societal domain: legacy. Dignity, quality of life, and quality of death.	No limitations identified by researchers.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Litwinczuk & Groh, 2007	US: 46 HIV-seropositive recruited from several community-based HIV/AIDS organizations.	To examine the relationship between spirituality, purpose in life, and well-being in a sample of 46 HIV-positive men and women.	Descriptive cross-sectional study. Spirituality was measured using the Spiritual Involvement and Beliefs Scale–Revised (SIBS-R).	Spirituality was reported to be significantly correlated with purpose in life ($r = .295$, $p = .049$) but not with well-being ($r = .261$, $p = .084$). Additionally, the SIBS-R, PIL, and GWB had alpha coefficients greater than .83.	Tool selection, based on study design not able to determine causal relationship between variables, small geographic area of subject recruitment, limited ethnic diversity of subjects, other variables not explored: social support, comorbidities.
Lockenhoff & Carstensen, 2004	Literature review	Socioemotional selectivity theory is that when boundaries on time are perceived, present-oriented goals related to emotional meaning are prioritized over future-oriented goals aimed at acquiring information and expanding horizons.	Theoretical framework.	Short time either with health or elders: shift decision to more emotionally positive decisions. Strongly correlated with chronological age, systematically influences social preferences, social network composition, emotion regulation, and cognitive processing. The very same motivational changes may limit health-related information-seeking and influence attention, memory, and decision-making such that positive material is favored over negative information.	Literature review process not described.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Marco & Larkin, 2008	1,831 participants representing 38 states, community settings included airports, bus stations, and hospital waiting rooms in Pennsylvania and Ohio	To determine knowledge and opinions of the general public regarding cardiopulmonary resuscitation.	22 question survey and 9 optional demographic questions.	Markedly inaccurate perceptions of cardiac arrest were reported. Participants' mean estimate of predicted survival rate after cardiac arrest was 54% (median 50%, IQR 35—75%), and mean estimated duration of resuscitative efforts in the ED was 28min (median 15min; IQR 10—30). Projected age and health status were independent predictors of resuscitation preferences in a series of 4 hypothetical scenarios. Older participants less likely CPR in addition to older scenarios,	Including slightly higher mean age, under representation of the Hispanic population, slightly increased % of single participants, and increased educational level.
Maugans, 1996	2 case studies	To assist the reader with addressing spirituality as a relevant medical topic.		Physicians can comfortably and competently talk with patients about spiritual and religious issues that may impact health care.	Other pneumonic are not included in the article.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
McDaniel, Grice, & Eason, 2010	US: 287 college students	To explore a multi-construct model of moral development.	Self-Report Family Inventory Version II. Spiritual Involvement and Beliefs Scale-Revised. Revised Moral Authority Scale. Interpersonal Reactivity Index. Test of Self-Conscious Affect 3–Short Version. Moral Judgment Test.	Ability to view moral development from a multi-construct perspective.	Limitations not identified by researchers.
Mystakidou et al., 2008	Greece: 82 hospitalized cancer patients	To study the influence of cancer patients' sociodemographic and clinical characteristics in their spiritual beliefs and attitudes.	Spiritual Involvement and Beliefs Scale. Descriptive analyses of the demographic and medical characteristics of the sample and bivariate correlations, t-tests or analyses of variance.	Among the most significant correlations were those between gender and all the subscales, cancer diagnosis, existential/meditative subscale, radiotherapy treatment and external/ritual, internal/fluid and existential meditative. In the prediction of spirituality, the contribution of gender, age, and years of education, performance status, and radiotherapy is high.	Small sample size. Only cancer patients.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Monod et al., 2011	35 instruments retrieved	To identify instruments used in clinical research that measure spirituality; to propose a classification of these instruments; and to identify those instruments that could provide information on the need for spiritual intervention.	Systematic literature search in MEDLINE, CINHAL, PsycINFO, ATLA, and EMBASE databases. A conceptual and a functional classification of instruments were developed.	General spirituality (N=22), spiritual well-being (N=5), spiritual coping (N=4), and spiritual needs (N = 4) according to the conceptual classification.	Excluded instruments: initially developed and used for other purpose than to investigate the relationship between spirituality and health; and designed on those dimensions loosely related to spirituality.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Nakashima & Canada, 2005	16 hospice patients	To examine resiliency factors and processes of older adults who experienced positive dying from their perspectives.	MVITAS McGill Semi structured open-ended interview. Average of 2 visits. Constant comparative method.	Spiritual beliefs and practices: positive dying experience. Core resiliency factors identified included empowering relationships with significant others, spiritual beliefs and practices, ability to skillfully confront mortality, and a stable caregiving environment. These older adults' psychological processes were characterized by a dialectical tension of surrender and resistance, and a creation of life-affirming narratives through which they derived meaning of death and dying. Aspects of personal growth and psychosocial and spiritual well-being were interrelated in these dying older adults' experience of life fulfillment.	Caucasians in a Midwestern state.
Narayanasamy, 2004	Review of the literature	To provide guidance for nurses in spiritual care.	Actioning Spirituality and Spiritual care in Education Training (ASSET).	Structure/content Process Outcome	Includes emotions in spiritual care, References personal ASSET.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Nixon & Narayanasamy, 2010	UK: 21 neuro-oncology patients at outpatient clinic	To identify the spiritual needs of neuro-oncology patients from a patient perspective and how nurses currently support patients with spiritual needs.	Critical Incident Technique questionnaire.	Supportive family relationships, emotional support, loneliness, religious needs, need to talk, reassurance, anxiety, solitude, denial, plans for the future, thoughts about meaning of life, end of life decisions and discussion of beliefs. Qualitative research approach used the critical incident technique.	Small sample to generalize. Recruitment of most functional patients.
O'Brien, 1999 & 2014	Book: Multiple studies Christian writer. Multiple instruments and populations.				
Petry & Finkel, 2004	210 participants	To determine if a patient's choice of conventional or alternative healthcare practitioner was related to total score on an instrument for scaling. Psychospiritual characteristics.	Spiritual Involvement and Beliefs Scale (SIBS), plus item scores of five separate questions and two factors.	SIBS scores in Practice 2 were significantly lower than in Practice 1 (p=.004), 3 (p=.001), 4 (p=.018), and 5 (p=.02). This pattern remained over the five question scores and two factors. Patients who chose a physician associated with CAM, or an alternative practitioner (chiropractor, naturopath, or homeopath) for their direct healthcare scored higher on a psychospiritual testing instrument (SIBS) than those who chose a conventional physician.	Convenience sample, primarily females.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Phelps, et al., 2009	345 palliative patients	To determine the way religious coping relates to the use of intensive life-prolonging end-of-life care among patients with advanced cancer.	Prospective, multi-site, longitudinal. Brief RCOPE.	Increased religious coping results in increased ICU. Positive religious coping remained a significant predictor of receiving intensive life-prolonging care near death. "Religious coping may influence medical decision making rather than directly affecting treatment preferences or orientation toward care. Religious copers may decide to undergo therapies with high risks and uncertain benefits because they trust that God could heal them through the proposed treatment."	Observed association may be other confounding variables. Predominantly Christian.
Phelps et al., 2012	US: patients with advanced cancer and 339 cancer physicians and nurses	To examine perceptions of spiritual care and uses mixed qualitative and quantitative methods.	Cross-sectional study. Two items from the Fetzer Multidimensional Measure of Religiousness/Spirituality for Use in Health Research. 33 assessed religiousness and spirituality and Brief RCOPE-religious coping.	Majority of patients (77.9%), physicians (71.6%), and nurses (85.1%) believed that routine spiritual care would have a positive impact on patients. Patients, prior spiritual care (AOR, 14.65; 95% CI, 1.51 to 142.23), increasing education (AOR, 1.26; 95% CI, 1.06 to 1.49), and religious coping (AOR, 4.79; 95% CI, 1.40 to 16.42) were associated with favorable perceptions of spiritual care.	Recruitment from a single geographic region and limited ethnic diversity of patients and relatively low religiousness/ spirituality within the Northeast. At times difficult to discern patient's vs other subject's results.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Puchalski & O'Donnell, 2005	Overview of specific beliefs	To review studies over the last decade that highlight the importance of spiritual and religious beliefs in how patients cope with serious illness and dying and their accompanying suffering.		Chronic pain and illness. Buddhism, Christianity, Hinduism, Islam, Judaism.	Literature review process not described.
Puchalski, et al., 2009	Consensus Report	To identify points of agreement about spirituality as it applies to healthcare and to make recommendations to advance the delivery of quality spiritual care in palliative care.	FICA (Faith=Beliefs, Importance, Community, Address in care or action), SPIRIT (Spiritual belief system, Personal Spirituality, Integration, Rituals=restrictions, Implications, and Terminal events), HOPE (Hope, Organized religion, Personal spirituality, Effects of care and decisions), and Domains of Spirituality.	Spiritual assessment, models of care/care plans, inter-professional team training, quality improvement, personal/ professional development.	In searching for the consensus we may overlook the individual.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Rodriguez & Young, 2006	30 elderly out patients and 30 providers	To explore how the patients themselves define or perceive four different concepts related to end-of-life care: life-sustaining treatment, terminal condition, state of permanent unconsciousness and decision- making capacity.	Cross section, semi-structured interviews.	The effect on quality of life; the emotional, financial and other costs; the likelihood of success; and the effect on length of life. Assisting the body temporarily rather than on a long-term or permanent basis (p. 447). Four factors were taken into account by the participants when discussing end-of-life interventions and outcomes: (1) effect on QoL; (2) emotional, financial and other costs; (3) likelihood of success; and (4) effect on length of life.	Small sample size, non-probability sampling technique, use of a single Veterans Administration clinic site and relative lack of gender, racial and ethnic diversity of the participants.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Roscoe et al., 2009	17 family care-givers	To test the utility of a stress-process model in predicting health and quality-of-life outcomes for family caregivers of persons with Huntington's disease.	Many scales: Katz Index of Independence in Daily Living Spiritual Involvement and Beliefs Scale–Revised Bivariate correlation analysis.	Significant positive relationships between satisfaction with emotionally supportive communication and life satisfaction. Significant positive correlations were found between positive appraisals of the benefits of the caregiving experience and life satisfaction and health. Mastery was significantly positively correlated with life satisfaction and negatively correlated with depressive symptoms; similar results were found between spirituality and outcome measures.	Small sample size, not all HD families have access to HD Centers of Excellence for medical care. Many scales used.
Rubin et al. 2009	38 chronically ill and 38 healthy adolescents and their parents	To explore the applicability of two adult scales, participants were assessed to explore the spiritual well-being of adolescents.	SIBS and SWBS. Independent sample t-tests. Pearson correlation coefficient.	Parents scored significantly higher than adolescents on both scales. Although this could indicate that parents have greater spiritual well-being than their children, these two findings taken together suggest these measures may be insufficiently sensitive measures of spirituality in childhood. Most adolescents and their parents felt both scales to be ineffective measures of adolescent spirituality.	Cross-section, small and heterogeneous sample, did not attempt to correlate any findings to the religious affiliations of the families, neither scale had been previously validated in adolescents. Qualitative study would have been more applicable.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Sharp, Carr, & Macdonald, 2012	US: 2,678	To assess the effects of religious denomination and ideology on end-of-life treatment preferences in two hypothetical terminal illness scenarios: physical pain and cognitive impairment.	Longitudinal study. Control variables: physical health, recent hospitalization, education, marital status, parental status. Bivariate analysis Multivariate analyses	Fundamentalist Catholics and Protestants were significantly more likely than their non-fundamentalist counterparts to desire life-extending treatments in both scenarios.	Persons in mid-60s, only non-Hispanic with at least a high school diploma.
Silvestri et al., 2003	US: 100 advanced lung cancer and 257 medical oncologists were interviewed	To compare the importance of faith on treatment decisions among doctors, patients, and patient caregivers.	Thurstone method (p.1380) of ranking to rank order the influencing factors for treatment vs. supportive care.	All three groups ranked the oncologist's recommendation as most important. Patients and caregivers ranked faith in God second, whereas physicians placed it last (P <.0001). Patients who placed a high priority on faith in God had less formal education (P <.0001).	All patients same geographical location. Patients may not have been clear about their prognosis.
Singer, Martin & Kelner, 1999	Canada: 126 participants from 3 patient groups: dialysis patients (n = 48), people with HIV (n = 40), and long-term care f residents (n = 38)	To identify and describe elements of quality end-of-life care from the patient's perspective.	Qualitative study using in-depth, open-ended, face-to-face interviews and content analysis.	Participants identified 5 domains of quality end-of-life care: receiving adequate pain and symptom management, avoiding inappropriate prolongation of dying, achieving a sense of control, relieving burden, and strengthening relationships with loved ones.	Primarily Caucasian, secondary analysis and maybe other domains, such as spirituality or economic issues that were overlooked.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Stanworth, 2006		To describe spiritual care at the end of life.		Spirituality refers to the interpretive story and ensuing values of an experience that is deeply human yet ultimately significant. Encounters with patients illustrate this "surplus of meaning." Spiritual horizons are recognizably present in the here and now but they may not be defined. Life is larger than language. Metaphors and stories, however, do exert cognitive purchase. They make real for us what cannot otherwise be said. Suffering, personal realization ("coming to know and to be") and liberation are discussed in the context of spiritual care and patient/carer dynamics. Attention is drawn to aspects of daily life that generally tend to be overlooked.	Literature review process not described.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Sullivan et al., 2004	US: 48 oncology hospitalized	To characterize their understanding of and beliefs about DNAR decisions and to identify dimensions of religiosity associated with moral beliefs about DNAR decisions.	Self-Report Questionnaire. The Hoge Intrinsic Religious Motivation Scale, 10-items. Religious Practices and Beliefs Scale developed by Tonigan and Miller	74% believed they understood the meaning of "DNAR," but only 32% provided an accurate definition. 17% believed that DNAR decisions are morally wrong, and 23% believed they are equivalent to suicide. Those who lacked an accurate understanding of DNAR status were significantly more likely to perceive them as morally wrong. Gender (males), but not religious denomination, was significantly related to patients' attitudes about the morality of DNAR decisions. The belief that DNAR decisions are morally wrong was predicted by certain religious practices, including near-daily meditation, near-daily thinking about God, and the current practice of meditation.	Small sample size. Didn't represent the population. Recruited by physician. Convenience sample. Caucasians and college or higher education over represented.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Sulmasy, 2002		A model for research and practice that expands on the biopsychosocial model to include the spiritual concerns of patients	Literature review.	"Logically, psychologically, socially, and transcendently. The patient is a human person. Illness disrupts all of the dimensions of relationships that constitute the patient as a human person, and therefore only a biopsychosocial-spiritual model can provide a foundation for treating patients holistically."	Literature review process not described.
Taylor, 2003	US: 28 African American and Euro-American adult patients with cancer and primary family caregivers were purposively selected to provide variation of experiences (e.g., religious backgrounds)	To determine what patients with cancer and primary family caregivers expect from nurses with regard to having their spiritual needs addressed.	Descriptive, cross-sectional, qualitative study using Miles and Huberman's approach to data reduction.	Informants identified nursing approaches for spiritual needs, including kindness and respect; talking and listening; prayer; connecting with symmetry, authenticity, and physical presence; quality temporal nursing care; and mobilizing religious or spiritual resources. To provide spiritual care, nurses must possess requisites of a personal, relational, or professional nature.	Saturation not met regarding how nurses can help patients, spiritual needs not defined, family/caregiver results blended into results.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
van Leeuwen et al., 2007	Netherlands: 13 focus groups with a total of 67 participants: patients, nurses and hospital chaplains working in oncology, cardiology and neurology in different institutions and regions	To gain insight into the spiritual aspects of nursing care within the context of healthcare in the Netherlands and to provide recommendations for the development of care in this area and the promotion of the professional expertise of nurses.	Focus groups; Descriptive, cross-sectional, qualitative study.	Specific recommendations for spiritual care included. Kindness and respect, mobilizing resources, connect.	Part of a larger study. No limitations identified by researchers.
Van Ness, Towle, O'Leary, & Fried, 2008	US: 226 elders in community with advanced cancer, CHF, COPD	To present empirical evidence about whether religious patients are more or less willing to undergo the risks associated with potentially life-sustaining treatment.	Longitudinal. Bivariate longitudinal analysis. 5 dimensions of religiousness: attendance at services, religious identity, religious comfort, and 2 indicators for growing closer to god and growing spirituality.	Results were mixed but persons who said that during their illness they grew closer to God (OR = 1.79; 95% CI = 1.15, 2.78) or those who grew spiritually (OR = 1.61; 95% CI = 1.03, 2.52) were more willing to accept risk associated with potentially life-sustaining treatment than were persons who did not report such growth.	Limited religious traditions and terminal diseases represented. Attendance can also be associated with mobility/function.
Vig et al., 2002	US: 16 palliative care, non-terminal heart disease or cancer	To explore the attitudes of older adults with medical illness about the end of life, and to investigate whether current values could be extended to end-of-life preferences.	Interview with open-ended and closed-ended questions.	Pain is bad (68%). Each participant voiced a unique combination of themes in describing good and bad deaths.	Selection bias: individual and physicians, did not collect information on refusal to participate, homogeneity.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Voogt, et al., 2005	Netherlands: 122 outpatients (palliative), 39% with family & 20% with HCP	The relationship of patients' attitudes toward treatment with advance care planning and the development of these attitudes after diagnosis of incurable cancer.	Descriptive study with interviews using open- and closed-ended questions.	Patients keep end of life wishes to themselves. Each participant voiced a unique combination of themes in describing good and bad deaths. Because each participant described a multifaceted view of a good death, for instance, no theme was mentioned by even half of the participants. Participants provided differing explanations for why given themes contributed to good deaths. Currently valued aspects of life were not easily translated into end-of-life preferences. Younger, and hx. of cancer < 6 months preferred life prolongation, older more tired, less positive feelings more included to strive for quality of life...three profiles: strive for quality of life, strive for longer life and no preference. QoL significantly influenced resuscitation recommendations.	Majority were Caucasian male veterans.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Volker & Wu, 2011	20 Texas: advanced lung cancer	To explore the meaning of control and control preferences in a group of racially and ethnically diverse patients with an advanced cancer diagnosis.	Qualitative. Hermeneutic phenomenological approach and "Lewis's conceptual typology of control".	2 Themes: Preferences for everyday control over treatment decision, family issues, final days of life, and arrangements after death awareness that cancer and death are controlled by a higher power.	Regional perspective. Potential screening bias. Participants only interviewed once. Data regarding participants eligible and not approached not known.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Weeks et al. (1998)	USA/ five teaching hospitals, 917 adults with stage III or IV	Test the hypothesis that among terminally ill cancer patients an accurate understanding of prognosis is associated with a preference for therapy that focuses on comfort over attempts at life extension.	Prospective cohort study.	Patients who preferred life-extending therapy were 1.6 (95% CI, 1.04-2.39) times more likely to: readmission to the hospital, an attempted resuscitation, or death while receiving ventilator assistance (42/146 [29%]) than patients who preferred therapy directed at pain relief (29/159 [18%]) (P=.03). In bivariable analysis, patients who preferred life-extending therapy were more likely to be alive at 6 months (P=.005). However, in a logistic regression model controlled for age, race, sex, education, income, insurance status, site and stage of disease, functional status, overall quality of life, and physician-prognostic estimates, there was no statistically significant difference in 6-month survival between those who favored life-extending therapy and those who did not.	Patient- or surrogate-perceived prognosis were available for only 63% of otherwise eligible study subjects. Results describe the beliefs and preferences of only those patients who were willing to share their views with the study team. Patients were hospitalized at an academic center.

Literature Review – Summary of Articles, Continued

Article/ Book	Patient Population (*n*)	Purpose	Method of Analysis	Findings	Limitations
Winter, Lawton, and Ruckdeschel (2003)	384 elderly people living in congregate housing (263 healthy, 131 frail)	To test Kahneman and Tversky's (1979) Prospect Theory as a model of preferences for prolonging life under various hypothetical health statuses.	Indicated how long (if at all) they would want to live under each of nine hypothetical health conditions (e.g., limited to bed or chair in a nursing home). Analyses of covariance: four conditions of functional ability, four conditions of cognitive impairment, and three pain conditions--each as a function of participant's current health status (frail vs. healthy).	The predicted interaction between frailty and declining prospective health status was obtained. Frail participants expressed preferences for longer life under more compromised health conditions than did healthy participants. The results imply that such preferences are malleable, changing as health deteriorates. They also help explain disparities between proxy decision-makers' and patients' own preferences as expressed in advance directives.	
Winzelberg, et al., 2005	Review of end-of-life decision-making literature			Dominant decision-making approach based on patient autonomy has not consistently served the interests of patients and families, especially when patients lack decision-making capacity.	Literature review process not described.
Woods & Ironson, 1999	US: medically ill, recruited via flyers	To define spiritual and religious from patient perspective.	Interviewed – open-ended questions.	Spiritual-recovery & healing happens through them and religious happens to them. Overall impact on life, behaviors, affect, somatic, beliefs.	Beliefs of researcher using open-ended questions, pre-scale development.

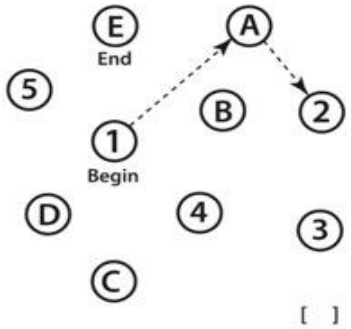
Appendix C

Montreal Cognitive Assessment

MONTREAL COGNITIVE ASSESSMENT (MOCA)
Version 7.1 Original Version

NAME :
Education : Date of birth :
Sex : DATE :

VISUOSPATIAL / EXECUTIVE — POINTS



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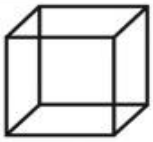


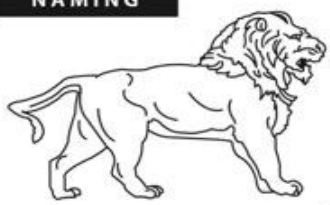
[ ] [ ]

Draw CLOCK (Ten past eleven)
(3 points)

[ ] Contour [ ] Numbers [ ] Hands

___/5

NAMING



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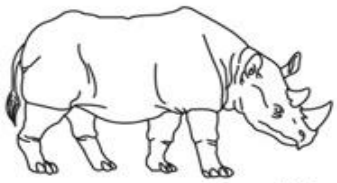
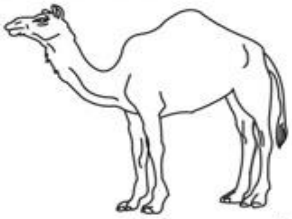


[ ]



[ ]

___/3

MEMORY Read list of words, subject must repeat them. Do 2 trials, even if 1st trial is successful. Do a recall after 5 minutes.

	FACE	VELVET	CHURCH	DAISY	RED
1st trial					
2nd trial					

No points

ATTENTION Read list of digits (1 digit/ sec.).

Subject has to repeat them in the forward order [ ] 2 1 8 5 4
Subject has to repeat them in the backward order [ ] 7 4 2

___/2

Read list of letters. The subject must tap with his hand at each letter A. No points if ≥ 2 errors
[ ] F B A C M N A A J K L B A F A K D E A A A J A M O F A A B

___/1

Serial 7 subtraction starting at 100 [ ] 93 [ ] 86 [ ] 79 [ ] 72 [ ] 65
4 or 5 correct subtractions: **3 pts**, 2 or 3 correct: **2 pts**, 1 correct: **1 pt**, 0 correct: **0 pt**

___/3

LANGUAGE Repeat : I only know that John is the one to help today. [ ]
The cat always hid under the couch when dogs were in the room. [ ]

___/2

Fluency / Name maximum number of words in one minute that begin with the letter F [ ] _____ (N ≥ 11 words)

___/1

ABSTRACTION Similarity between e.g. banana - orange = fruit [ ] train – bicycle [ ] watch - ruler

___/2

DELAYED RECALL

	Has to recall words **WITH NO CUE**	FACE [ ]	VELVET [ ]	CHURCH [ ]	DAISY [ ]	RED [ ]	Points for UNCUED recall only
Optional	Category cue						
	Multiple choice cue						

___/5

ORIENTATION [ ] Date [ ] Month [ ] Year [ ] Day [ ] Place [ ] City

___/6

© Z.Nasreddine MD **www.mocatest.org** Normal ≥ 26 / 30

TOTAL ___/30
Add 1 point if ≤ 12 yr edu

Administered by: _____

Appendix D

Spiritual Beliefs and Resuscitation Decision Questionnaire

Survey Number_____

Please X/circle/or fill in the following:

1. Gender	1. Male ☐ 2. Female ☐
2. Age (years)	
3. Marital status:	1. Married/living with partner or supportive person ☐ 2.Single/divorced/widow/separated ☐
4. Do you need help with:	1. Bathing yourself ☐ 2. Dressing yourself ☐ 3. Toileting yourself ☐ 4. Getting in/out of bed ☐ 5. Controlling urine or bowel movements ☐ 6. Feeding yourself ☐
5. Religion: current belief (most identify with)	1. Agnostic ☐ 2. Atheist ☐ 3. Born Again Christian ☐ 4. Buddhist ☐ 5. Catholic ☐ 6. Hindu ☐ 7. Jehovah's Witness ☐ 8. Jewish ☐ 9. Muslim ☐ 10. Mormon ☐ 11. Orthodox ☐ 12. Protestant ☐ 13. Other ☐ Specify _____

Spiritual Beliefs and Values Questionnaire, Continued

6. Ethnicity (most identify with)	1. Asian ☐ 2. Cambodian ☐ 3. Chinese ☐ 4. Filipino ☐ 5. Hawai‘ian ☐ 6. Japanese ☐ 7. Mixed ☐ 8. Part Hawai‘ian ☐ 9. Pacific Islander ☐ 10. Vietnamese ☐ 11. Caucasian/White ☐ 12. African American/Black ☐ 13, Other ☐ Specify_____
7. Do you have any of these illnesses or recent surgery?	Cancer ☐ Heart Disease ☐ Lung Disease ☐ Kidney Disease ☐ Bone injury or bone surgery ☐ Diabetes ☐ Stroke or seizures ☐ Stomach or gut surgery or disease ☐ Other ☐ Specify_____

Spiritual Beliefs and Values Questionnaire, Continued

How strongly do you agree with the following statements? Please X your response.

	Strongly Agree	Agree	Mildly Agree	Neutral	Mildly Disagree	Disagree	Strongly Disagree
8. I set aside time for meditation and/or self-reflection	7	6	5	4	3	2	1
9. I can find meaning in times of hardship.	7	6	5	4	3	2	1
10. A person can be fulfilled without pursuing an active spiritual life.	7	6	5	4	3	2	1
11. I find serenity by accepting things as they are.	7	6	5	4	3	2	1
12. I have a relationship with someone I can turn to for spiritual guidance.	7	6	5	4	3	2	1
13. Prayers do not really change what happens.	7	6	5	4	3	2	1
14. In times of despair, I can find little reason to hope.	7	6	5	4	3	2	1
15. I have a personal relationship with a power greater than myself.	7	6	5	4	3	2	1

Spiritual Beliefs and Values Questionnaire, Continued

	Strongly Agree	Agree	Mildly Agree	Neutral	Mildly Disagree	Disagree	Strongly Disagree
16. I have had a spiritual experience that greatly changed my life.	7	6	5	4	3	2	1
17. When I help others, I expect nothing in return.	7	6	5	4	3	2	1
18. I don't take time to appreciate nature.	7	6	5	4	3	2	1
19. I have joy in my life because of my spirituality.	7	6	5	4	3	2	1
20. My relationship with a higher power helps me love others more completely.	7	6	5	4	3	2	1
21. Spiritual writings enrich my life.	7	6	5	4	3	2	1
22. I have experienced healing after prayer.	7	6	5	4	3	2	1
23. My spiritual understanding continues to grow.	7	6	5	4	3	2	1

Spiritual Beliefs and Values Questionnaire, Continued

	Strongly Agree	Agree	Mildly Agree	Neutral	Mildly Disagree	Disagree	Strongly Disagree
24. I focus on what needs to be changed in me, not on what needs to be changed in others.	7	6	5	4	3	2	1
25. In difficult times, I am still grateful.	7	6	5	4	3	2	1
26. I have been through a time of suffering that led to spiritual growth.	7	6	5	4	3	2	1
27. I solve my problems without using spiritual resources.	7	6	5	4	3	2	1
28. I examine my actions to see if they reflect my values.	7	6	5	4	3	2	1

29. Please circle: How spiritual a person do you consider yourself? (With "7" being the most spiritual)

0 1 2 3 4 5 6 7

(Not Spiritual at all) (Most Spiritual)

30. Please circle: Your current pain level on a scale from 0-10: (0=no pain, and 10=the worst pain in your life).

0 1 2 3 4 5 6 7 8 9 10

How strongly do you agree with the following statements? Please X your response.

Spiritual Beliefs and Values Questionnaire, Continued

	Strongly Agree	**Agree**	**Neither agree or Disagree**	**Disagree**	**Strongly disagree**
31. I am a spiritual person.	4	3	2	1	0
32. I believe I have a spirit or soul that can survive my death.	4	3	2	1	0
33. I believe in a personal God.	4	3	2	1	0
34. I believe meditation has value.	4	3	2	1	0
35. I believe God is an all pervading presence.	4	3	2	1	0
36. I believe what happens after I die is determined by how I have lived my life.	4	3	2	1	0
37. I believe there are forces for evil in the Universe.	4	3	2	1	0
38. Although I cannot always understand, I believe everything happens for a reason.	4	3	2	1	0
39. I believe human physical contact can be a spiritual experience.	4	3	2	1	0
40. I feel most at one with the world when surrounded by nature.	4	3	2	1	0
41. I believe in life after death.	4	3	2	1	0
42. I am a religious person.	4	3	2	1	0
43. Religious ceremonies are important to me.	4	3	2	1	0
44. I believe life is planned out for me.	4	3	2	1	0

Spiritual Beliefs and Values Questionnaire, Continued

	Strongly Agree	**Agree**	**Neither agree or Disagree**	**Disagree**	**Strongly disagree**
45. I believe God is a life force.	4	3	2	1	0
46. At least once in my life, I have had an intense spiritual experience.	4	3	2	1	0
47. I believe there is a heaven.	4	3	2	1	0
48. I believe the human spirit is immortal.	4	3	2	1	0
49. I believe prayer has value.	4	3	2	1	0
50. I believe there is a God.	4	3	2	1	0

"The question below may cause you distress. You are free to not answer it. Please let me know if you need additional time to talk after you have completed the survey." Please X:

51. If your heart were to stop would you want someone to try to restart it?	☐Yes ☐No
52. If you were to stop breathing would you want a breathing tube and machine?	☐Yes ☐No

Number of days hospitalized: _____

(Hatch, 2013; Katz, Downs, Cash, & Grotz, 1970; King, et al., 2006)

Appendix E

Spiritual Involvement and Beliefs Scale-Revised

How strongly do you agree with the following statements? Please circle your response.

	Strongly Agree	**Agree**	**Mildly Agree**	**Neutral**	**Mildly Disagree**	**Disagree**	**Strongly Disagree**
1. I set aside time for meditation and/or self-reflection	7	6	5	4	3	2	1
2. I can find meaning in times of hardship.	7	6	5	4	3	2	1
3. A person can be fulfilled without pursuing an active spiritual life.	7	6	5	4	3	2	1
4. I find serenity by accepting things as they are.	7	6	5	4	3	2	1
5. I have a relationship with someone I can turn to for spiritual guidance.	7	6	5	4	3	2	1
6. Prayers do not really change what happens.	7	6	5	4	3	2	1
7. In times of despair, I can find little reason to hope.	7	6	5	4	3	2	1

Spiritual Involvement and Beliefs Scale-Revised, Continued

8. I have a personal relationship with a power greater than myself.	7	6	5	4	3	2	1
9. I have had a spiritual experience that greatly changed my life.	7	6	5	4	3	2	1
10. When I help others, I expect nothing in return.	7	6	5	4	3	2	1
11. I don't take time to appreciate nature.	7	6	5	4	3	2	1
12. I have joy in my life because of my spirituality.	7	6	5	4	3	2	1
13. My relationship with a higher power helps me love others more completely.	7	6	5	4	3	2	1
14. Spiritual writings enrich my life.	7	6	5	4	3	2	1
15. I have experienced healing after prayer.	7	6	5	4	3	2	1

Spiritual Involvement and Beliefs Scale-Revised, Continued

16. My spiritual understanding continues to grow.	7	6	5	4	3	2	1
17. I focus on what needs to be changed in me, not on what needs to be changed in others.	7	6	5	4	3	2	1
18. In difficult times, I am still grateful.	7	6	5	4	3	2	1
19. I have been through a time of suffering that led to spiritual growth.	7	6	5	4	3	2	1
20. I solve my problems without using spiritual resources.	7	6	5	4	3	2	1
21. I examine my actions to see if they reflect my values.	7	6	5	4	3	2	1

22. How spiritual a person do you consider yourself? (With "7" being the most spiritual)

0 1 2 3 4 5 6 7

(Not Spiritual at all) (Most Spiritual)

Appendix F

Beliefs and Values Scale

	Strongly Agree	**Agree**	**Neither Agree or Disagree**	**Disagree**	**Strongly Disagree**
I am a spiritual person.	4	3	2	1	0
I believe I have a spirit or soul that can survive my death.	4	3	2	1	0
I believe in a personal God.	4	3	2	1	0
I believe meditation has value.	4	3	2	1	0
I believe God is an all pervading presence.	4	3	2	1	0
I believe what happens after I die is determined by how I have lived my life.	4	3	2	1	0
I believe there are forces for evil in the Universe.	4	3	2	1	0
Although I cannot always understand, I believe everything happens for a reason.	4	3	2	1	0
I believe human physical contact can be a spiritual experience.	4	3	2	1	0

Beliefs and Values Scale, Continued

	Strongly Agree	**Agree**	**Neither Agree or Disagree**	**Disagree**	**Strongly Disagree**
I feel most at one with the world when surrounded by nature.	4	3	2	1	0
I believe in life after death.	4	3	2	1	0
I am a religious person.	4	3	2	1	0
Religious ceremonies are important to me.	4	3	2	1	0
I believe life is planned out for me.	4	3	2	1	0
I believe God is a life force.	4	3	2	1	0
At least once in my life, I have had an intense spiritual experience.	4	3	2	1	0
I believe there is a heaven.	4	3	2	1	0
I believe the human spirit is immortal.	4	3	2	1	0
I believe prayer has value.	4	3	2	1	0
I believe there is a God.	4	3	2	1	0

Appendix G

Calendar Recruitment Nursing Units

Week	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1						Iol 2 & T9Ewa: 11/20	P4: 11/21
2	T9Ewa &Iol 2: 11/22	P4: 11/23	QET 7: 11/24	QET 9Dh: 11/25	QET 8Dh/Ewa: 11/26	P7: 11/27	P5: 11/28
3	P7: 11/29	Iol 2 & T9Ewa: 11/30	QET 9Dh: 12/1	P5: 12/2	P4: 12/3	QET 7: 12/4	QET 8Ewa/Dh: 12/5
4	QET 7: 12/6	P7: 12/7	QET 8Dh/Ewa: 12/8	QET 9Dh: 12/9	P4: 12/10	P5: 12/11	T9Ewa &Iol 2: 12/12
5	QET 7: 12/13	QET 9Dh: 12/14	QET 8Ewa/Dh: 12/15	Iol 2 & T9Ewa: 12/16	P7: 12/17	P4: 12/18	P5: 12/19
6	P4: 12/20	QET 7: 12/21	P5: 12/22	T9Ewa &Iol 2: 12/23	QET 8Dh/Ewa: 12/24	QET 9Dh: 12/25	P7: 12/26
7	QET 9Dh: 12/27	P4: 12/28	Iol 2 & T9Ewa: 12/29	QET7: 12/30	QET 8Ewa/Dh: 12/31	P7: 1/1	P5: 1/2
8	QET 9Dh: 1/3	P5: 1/4	QET 8Dh/Ewa: 1/5	QET 7: 1/6	P7: 1/7		P4: 1/16

Appendix H

Consent

THE QUEEN'S MEDICAL CENTER

&

UNIVERSITY of HAWAI'I

HONOLULU, HAWAI'I

INFORMED CONSENT TO TAKE PART IN A CLINICAL RESEARCH STUDY

Title of Study: **EXPLORATION OF PATIENTS' BELIEFS and RESUSCITATION DECISIONS**

Principal Investigator: Elizabeth Freitas, APRN

Address: 1301 Punchbowl, Honolulu, HI 96813

Phone: 808-691-4604

INFORMED CONSENT

You are being asked to take part in this research study *because you are at least 18 years old, and hospitalized at The Queen's Medical Center*. This is a research study that will *describe the beliefs and values of hospitalized patients.*

Before you decide whether or not to take part in this study, you must understand the purpose, how it may help, any risks, and what you have to do. This process is called informed consent. The researcher(s) will talk with you about the study and the informed consent form. The

consent also gives you information about what health information will be collected as part of the research study and how that information will be used or disclosed. Once you understand the study, and if you agree to take part, you will be asked to sign this consent form. If you sign this form you are agreeing to take part in this study and to allow the use and disclosure of your medical records and health information collected in connection with your part in this study. You will be given a **signed** copy to keep. If you do not sign this consent form, you may continue to receive care, but not as part of this study."

Before you learn about the study, it is important that you know the following:

- Taking part in this study is of your own free will.
- You may decide not to take part in the study or stop being in the study at any time without it making any difference to your care now or in the future, or to any benefits that you are allowed.

If the study changes in any way which could make a difference to your taking part, you will be told about the changes and may be asked to sign a new consent form.

PURPOSE OF THE STUDY

The purpose of this research study is to explore the beliefs and values of people in the hospital. She is asking you to participate in this project because you are at least 18 years old and you are hospitalized at The Queen's Medical Center. She has no potential financial or other conflicts of interest regarding this study.

PROCEDURES

If you decide to take part in this project, you will be asked to fill out a survey. You will read the questions of the survey and circle or place an X on the response that best fits your current condition, beliefs or values. There are no right or wrong answers. Completing the survey will take approximately 20 minutes. After you finish the survey you will be asked to put it into an envelope and close the envelope so your answers remain confidential. It is expected that approximately 84 people will take part in this project.

Your medical record number will only be kept on file while the 84 patients are being recruited to prevent patients being asked to participate in the study. Your medical record number will never be linked to your responses.

RISKS

There may be some risk to you in participating in this project, namely that you may feel some emotional distress answering some of the questions on the survey. If you do feel distress, please inform the researcher, or discuss it with your nurse, social worker, chaplain or doctor.

BENEFITS

There will be no direct benefit to you for taking part in this project. The findings from this project may help nurses and other professionals better care for people in your situation

OTHER TREATMENT

You may choose to not take part in this study without it making a difference in the care that you get now or in the future.

CONFIDENTIALITY

Federal Privacy Regulations provide safeguards for privacy, security, and authorized access to health information. The confidentiality of all study-related records will be

kept according to all applicable laws. Information gained during this study and information known about you will be confidential (private) to the extent permitted by state and federal law. The results of this research may be presented at meetings or in publications; however, your identity will not be disclosed.

You will not be asked for any personal information, such as your name or address. Please do not include any personal information in your survey responses. If the researcher feels that you are at risk of harming yourself or others she will need to inform you and your doctor. If there is a discrepancy between your resuscitation decision and your current code status order, she will also inform you and your doctor.

REMOVAL FROM THE STUDY

You take part in this study of your own free will. You may be taken off the study without your consent for any of the following reasons:

- Your condition gets worse;
- Or the researcher feels you are unable to answer the questions

WHO TO CONTACT

If you have any questions about your treatment, your rights as a volunteer or any other matter relating to this study, you may call Elizabeth Freitas at 808-691-4604 or ea8@hawaii.edu and talk about any questions that you might have. You may also contact her adviser, Dr. Sandra LeVasseur, at 808-956-0894 or email sandraal@hawaii.edu. If you have questions about your rights as a research participant, you may contact the UH Human Studies Program at 808-956-5007 or uhirb@hawaii.edu.

If you cannot get satisfactory answers to your questions or you have comments or complaints about your treatment in this study, you may contact:

Research & Institutional Review Committee

The Queen's Medical Center
1301 Punchbowl Street
Honolulu, HI 96813
Phone: (808) 691-4512

AGREEMENT TO TAKE PART AND CERTIFICATION

I have read and understand the description of this study such as the purpose and nature of this study, its expected length, the procedures to be done, reasonably known risks and discomforts, benefits to expect, other treatments I may have, release of my medical records,

payment and medical treatment for injury, and removal without my consent for this research study.

I am taking part in this study of my own free will. I may withdraw (stop taking part) and/or withdraw my authorization for use and release of protected health information at any time after signing this consent form without it making a difference to my care now or in the future or any loss of benefits that I am allowed. My consent does not take away my legal rights in case of carelessness or negligence of anyone connected with this study.

My signature means that I have read the information above or that it has been read to me, my questions have been satisfactorily answered, and at any time I have other questions, I can contact the researcher listed on the first page.

cc: *Signed copy* of consent/authorization form to patient

_____	_____	_____
Subject's Name (Print)	Subject's Signature	Date/ Time
_____	_____	_____
Witness' Name (Print) (Witnessing Signature Only)	Witness' Signature **********	Date/ Time

I have explained this research to the above subject. In my judgment the subject is voluntarily and knowingly giving informed consent and has the legal capacity to give informed consent to take part in this research study.

_____	_____	_____

Consent, continued

Investigator's Name (Print) Investigator's Signature Date/ Time

(Individual obtaining Subject's consent)

(Investigator: fax a copy of this signed page to Research Regulatory Office at 691-7897 within 24 hours of signing.)

Appendix I

Scripts

Researcher introduction to nurse caring for patient:

Hi, _____ my name is Elizabeth Freitas and I'm a University of Hawai'i PhD Student. I'm doing a research study on patients' beliefs and resuscitation preferences. Does your patient _____ have any tests, procedures, or activities planned for the next 30 minutes? Thank you.

Researcher introduction to patient:

Hi, _____ my name is Elizabeth Freitas and I'm a University of Hawai'i PhD Student. I'm doing a research study on patients' beliefs and resuscitation preferences. I'd like to ask you some questions, and if you are willing, fill out a survey that will take 30 minutes?

Yes:

Researcher reads consent form and requests each patient's signature.

Do you have any questions about the study?

Here is your copy of the consent and the one for you to sign.

Researcher administers MoCA and passes MoCA:

Administers survey to patient

No time:

Would you be willing for me to come back later today or tomorrow?

Score not high enough to pass MoCA or no time:

Thank you for your time and have a nice day.

References

Alcorn, S. R., Balboni, M. J., Prigerson, H. G., Reynolds, A., Phelps, A. C., Wright, A. A., Balboni, T. A. (2010). "If God wanted me yesterday, I wouldn't be here today": Religious and spiritual themes in patients' experiences of advanced cancer. *Journal of Palliative Medicine, 13*(5), 581-588. doi: 10.1089/jpm.2009.0343

Allen, R. S., Allen, J. Y., Hilgeman, M. M., & DeCoster, J. (2008). End-of-life decision-making, decisional conflict, and enhanced information: Race effects. *Journal of the American Geriatrics Society, 56*(10), 1904-1909. doi: 10.1111/j.1532-5415.2008.01929.x

America's Health Rankings (2016). Retrieved from Arundel Metrics, Inc, of Saint Paul, Minnesota, conducted this project for and in cooperation with United Health Foundation website http://cdnfiles.americashealthrankings.org/SiteFiles/Reports/Final%20Report-Seniors-2016-Edition.pdf

Anandarajah, G., & Hight, E. (2001). Spirituality and medical practice: Using the HOPE questions as a practical tool for spiritual assessment. *American Family Physician, 63*(1), 81-89.

Balboni, T. A., Paulk, M. E., Balboni, M. J., Phelps, A. C., Loggers, E. T., Wright, A. A., Prigerson, H. G. (2010). Provision of spiritual care to patients with advanced cancer: Associations with medical care and quality of life near death. *Journal of Clinical Oncology, 28*(3), 445-452. doi: 10.1200/JCO.2009.24.8005

Barnum, B. (2006). Spirituality in nursing: From traditional to new age. Retrieved from http://site.ebrary.com/lib/uhmanoa/Doc?id=10265480

Barry, B., & Henderson, A. (1996). Nature of decision-making in the terminally ill patient. *Cancer Nursing, 19*(5), 384-391.

Bartel, M. (2004). What is spiritual? What is spiritual suffering? *The Journal of Pastoral Care & Counseling, 58*(3), 187-201.

Bauer-Wu, S., Barrett, R., & Yeager, K. (2007). Spiritual perspectives and practices at the end-of-life: A review of the major world religions and application to palliative care. *Indian Journal of Palliative Care, 13*(2), 6. doi: 10.4103/0973-1075.38900

Belanger, E., Rodriguez, C., & Groleau, D. (2011). Shared decision-making in palliative care: A systematic mixed studies review using narrative synthesis. *Palliatiatve Medicine, 25*(3), 242-261. doi: 10.1177/0269216310389348

Blanchard, C. G., Labrecque, M. S., Ruckdeschel, J. C., & Blanchard, E. B. (1988). Information and decision-making preferences of hospitalized adult cancer patients. *Social Science & Medicine, 27*(11), 1139-1145. doi: 10.1016/0277-9536(88)90343-7

Boscaglia, N., Clarke, D. M., Jobling, T. W., & Quinn, M. A. (2005). The contribution of spirituality and spiritual coping to and depression in women with a recent diagnosis of gynecological cancer. *Intenational Journal Gynecological Cancer, 15*(5), 755-761. doi: 10.1111/j.1525-1438.2005.00248.x

Boyan, A. S. (1968). Defining Religion in Operational and Institutional Terms. *University of Pennsylvania Law Review, 116*(3), 479–498. http://doi.org/10.2307/3310950

Bradshaw, A. (1999). The virtue of nursing: The covenant of care. *Journal of Medical Ethics, 25*, 477-481. doi: 10/111/j.1365-2850.2006.0095.x

Brady, M. J., Peterman, A. H., Fitchett, G., Mo, M., & Cella, D. (1999). A case for including spirituality in quality of life measurement in oncology. *Psychooncology, 8*(5), 417-428. doi: 10.1002/(SICI)1099-1611(199909/10)8:5<417::AID-PON398>3.0.CO;2-4

Bregman, L. (2006). Spirituality: A glowing and useful term in search of a meaning. *OMEGA-Journal of Death and Dying, 53*(1-2), 5-26. doi: 10.2190/40NU-Q4BX-9E9K-R52A

Brown, A. E., Tonigan, J. S., Pavlik, V. N., Kosten, T. R., & Volk, R. J. (2013). Spirituality and confidence to resist substance use among Celebrate Recovery participants. *Journal of Religion and Health, 52*(1), 107-113. doi: 10.1007/s10943-011-9456-x

Bulow, H. H., Sprung, C. L., Reinhart, K., Prayag, S., Du, B., Armaganidis, A., . . . Levy, M. M. (2008). The world's major religions' points of view on end-of-life decisions in the intensive care unit. *Intensive Care Medicine, 34*(3), 423-430. doi: 10.1007/s00134-007-0973-8

Burkhart, L., & Hogan, N. (2008). An experiential theory of spiritual care in nursing practice. *Quality Health Research, 18*(7), 928-938. doi: 10.1177/1049732308318027

Cadell, S., Regehr, C., & Hemsworth, D. (2003). Factors contributing to posttraumatic growth: a proposed structural equation model. *American Journal of Orthopsychiatry, 73*(3), 279-287. doi: 10.1037/0002-9432.73.3.279

Candy, B., Jones, L., Varagunam, M., Speck, P., Tookman, A., & King, M. (2012). Spiritual and religious interventions for well-being of adults in the terminal phase of disease. *Cochrane Database Syst Rev, 5*, CD007544. doi: 10.1002/14651858.CD007544.pub2

Carey, S. M., & Cosgrove, J. F. (2006). Cultural issues surrounding end-of-life care. *Current Anaesthesia & Critical Care, 17*(5), 263-270. doi: 10.1016/j.cacc.2006.10.002

Carmel, S., & Mutran, E. (1999). Stability of elderly persons'expressed preferences regarding the use of life-sustaining treatments. *Journals of Gerontology B Psychol Science & Soc Science, 49*(3), 303-311. doi: 10.1016/S0277-9536(99)0012-5

Celso, B. G., & Meenrajan, S. (2010). The triad that matters: palliative medicine, code status, and health care costs. *The American Journal of Hospice & Palliative Care, 27*(6), 398-401. doi: 10.1177/1049909110363806

Chao, C. S., Chen, C. H., & Yen, M. (2002). The essence of spirituality of terminally ill patients. *Journal of Nursing Research, 10*(4), 237-245. doi: 10.1097/01.JNR.0000347604.89509.bf

Charles, C., Gafni, A., & Whelan, T. (1997). Shared decision-making in the medical encounter: What does it mean? (Or it takes at least two to tango). *Social Science & Medicine, 44*(5), 681-692. doi: 10.1016/S0277-9536(96)00221-3

Charles, C., Whelan, T., & Gafni, A. (1999). What do we mean by partnership in making decisions about treatment? *British Medical Journal, 319*(7212), 780-782. doi: 10.1136/bmj.319.7212.780

Chio, C. C., Shih, F. J., Chiou, J. F., Lin, H. W., Hsiao, F. H., & Chen, Y. T. (2007). The lived experiences of spiritual suffering and the healing process among Taiwanese patients with terminal cancer. *Journal of Clinical Nursing, 17*(6), 735-743. doi: 10.1111/j.1365-2702.2006.01854.x

Clark, P., Drain, M., & Malone, M. (2003). Patient centeredness: Addressing patients' emotional and spiritual needs. *Joint Commission Journal on Quality and Safety, 29*(12), 659-670. Retrieved from http://www.curatehealth.me/wp-content/uploads/2012/10/addressing_es_needs.pdf

Conner, N. E. (2012). Predictive factors of hospice use among Blacks: applying Andersen's Behavioral Model. *American Journal of Hospice & Palliative Care, 29*(5), 368-374. doi: 10.1177/1049909111425227

Covinsky, K., Palmer, R., Fortinsky, R., Counsell, S, Stewart, A., Kresevic, D., . . . Landefeld, C.S. (2003). Loss of independence in acitivities of daily living in older adults hospitialized with medical illness: Increased vulnerabilty with age. *Journal of the American Geriatrics Society, 51*(4), 451-458. doi: 10.1046/j.1532-5415.2003.51152.x

Delgado-Guay, M. R., Chisholm, G., Williams, J., Frisbee-Hume, S., Ferguson, A. O., … Bruera, E. (2015). Frequency, intensity, and correlates of spiritual pain in advanced cancer patients assessed in a supportive/palliative care clinic. *Palliative and Supportive Care*. doi:10.1017/S147895151500108X

DeVellis, R. F. (2012). *Scale development: Theory and applications* (3rd ed.). Thousand Oaks, Calif.: Sage Publications.

Dossey, B. M. (1989). *Holistic health promotion: A guide for practice*. Rockville, Md.: Aspen Publishers.

Drought, T. S., & Koenig, B. A. (2002). "Choice" in end-of-life decision making: researching fact or fiction? *The Gerontologist, 42 Spec No 3*, 114-128. doi: 10.1093/geront/

42.suppl_3.114

Egan, R., MacLeod, R., Jaye, C., McGee, R., Baxter, J., & Herbison, P. (2011). What is spirituality? Evidence from a New Zealand hospice study. *Mortality: Promoting the interdisciplinary study of death and dying, 16*(4), 17. doi: 10.1080/13576275.2011613267

Ehman, J. W., Ott, B. B., Short, T. H., Ciampa, R. C., & Hansen-Flaschen, J. (1999). Do patients want physicians to inquire about their spiritual or religious beliefs if they become gravely ill? *Archives of Internal Medicine, 159*(15), 1803-1806. Doi: 10.1001/archinte .159.15.1803

Elliott, B. A., Gessert, C. E., Larson, P., & Russ, T. E. (2012). Religious beliefs and practices in end-stage renal disease: implications for clinicians. *Journal of Pain & Symptom Management, 44*(3), 400-409. doi: 10.1016/j.jpainsymman.2011.09.019

Emblen, J. D. (1992). Religion and spirituality defined according to current use in nursing literature. *Journal of Professional Nursing, 8*(1), 41-47. doi: 10.1016/8755-7223(92)90116-G

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: tests for correlation and regression analyses. *Behavioral Research Methods, 41*(4), 1149-1160. doi: 10.3758/BRM.41.4.1149

Field, A. P. (2009). *Discovering statistics using SPSS: (And sex, drugs and rock 'n' roll)* (3rd ed.). Los Angeles: SAGE Publications.

Flannelly, K. J., Galek, K., Tannenbaum, H. P., & Handzo, G. F. (2007). A preliminary proposal for a scale to measure the effectiveness of pastoral care with family members of

hospitalized patients. *Journal of Pastoral Care Counsel, 61*(1-2), 19-29. doi: 10/1177/154230500706100103

Frank, R. K. (2009). Shared decision making and its role in end of life care. *British Journal of Nursing, 18*(10), 612-618. doi: 10.12968/bjon.2009.18.10.42466

Fried, T. R., Van Ness, P. H., Byers, A. L., Towle, V. R., O'Leary, J. R., & Dubin, J. A. (2007). Changes in preferences for life-sustaining treatment among older persons with advanced illness. *Journal of General Internal Medicine, 22*(4), 495-501. doi: 10.1007/s11606-007-0104-9

Galek, K., Flannelly, K. J., Vane, A., & Galek, R. M. (2005). Assessing a patient's spiritual needs: A comprehensive instrument. *Holistic Nursing Practice, 19*(2), 62-69. doi: 10.1097/00004650-2005030000-00006

Gauthier, D. (2005). Decision making near the end of life. *Journal of Hospice and Palliative Nursing, 7*(2), 8. doi: 10.1080/01924788.2010.525735

Gauthier DM, & Swigart, V. (2003). The contextual nature of decision making near the end of life: Hospice patients' perspectives. *American Journal of Hospice & Palliative Care, 20*(2), 8. doi: 10.1177/104990910302000210

Hall, B. A. (1998). Patterns of spirituality in persons with advanced HIV disease. *Research in Nursing & Health, 21*(2), 143-153. doi: 10.1002/(SICI)1098-240X(199804)21:2 <143::AID-NUR5>3.0CO;2-J

Hanson, L. C., Dobbs, D., Usher, B. M., Williams, S., Rawlings, J., & Daaleman, T. P. (2008). Providers and types of spiritual care during serious illness. *Journal of Palliative Medicine, 11*(6), 907-914. doi: 10.1089/jpm.2008.0008

Hatch, R. L., Burg, M. A., Naberhaus, D. S., & Hellmich, L. K. (1998). The Spiritual Involvement and Beliefs Scale. Development and testing of a new instrument. *Journal of Family Practice, 46*(6), 476-486.

Hawai‘i Population. (2013) Retrieved September 10, 2013, 2013, from http:/http://www.worldpopulationstatistics.com/hawaii-population-2013

Hermann, C. P. (2001). Spiritual needs of dying patients: A qualitative study. *Oncology Nursing Forum, 28*(1), 67-72. doi: 10.4103/0973-1075.150190

Holloway, M., Adamson, S., McSherry, W., & Swinton, J. (2011). Spiritual Care at the End of Life: a systematic review of the literature. Retrieved October 16, 2014, from https://http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/215798/dh_123804.pdf

Horne, G., Seymour, J., & Payne, S. (2012). Maintaining integrity in the face of death: A grounded theory to explain the perspectives of people affected by lung cancer about the expression of wishes for end of life care. *International Journal Nursing Studies, 49*(6), 718-726. doi: 10.1016/j.ijnurstu.2011.12.003

Hunt, J., Cobb, M., Keeley, V. L., & Ahmedzai, S. H. (2003). The quality of spiritual care--developing a standard. *International Journal Palliative Nursing, 9*(5), 208-215. doi: 10.12968/ijpn.2003.9.5.11493

Hyland, M. E., Geraghty, A. W., Joy, O. E., & Turner, S. I. (2006). Spirituality predicts outcome independently of expectancy following flower essence self-treatment. *Journal of Psychosomatic Research, 60*(1), 53-58. doi: 10.1016/j.jpsychores.2005.06.073

Hyland, M. E., Whalley, B., & Geraghty, A. W. (2007). Dispositional predictors of placebo responding: a motivational interpretation of flower essence and gratitude therapy. *Journal of Psychosomatic Research, 62*(3), 331-340. doi: 10.1016/j.jpsychores.2006.10.006

Ireland, J. (2010). Palliative care: a case study and reflections on some spiritual issues. *British Journal of Nursing, 19*(4), 237-240. doi: 10.12968/bjon.2010.19.4.46786

IASP.(1994). Part III: Pain terms, A current list with definitions and notes on usage classification of chronic pain.In H. Merskey & N. Bogduk (Eds.), Second Edition, *IASP Task Force on Taxonomy* (p 209). ISAP Press, Seattle, 1994.

Jaul, E., Zabari, Y., & Brodsky, J. (2014). Spiritual background and its association with the medical decision of DNR at terminal life stages. *Archives of Gerontology & Geriatrics, 58*(1), 25-29. doi: 10.1016/j.archger.2013.08.004

Johnson, R. W., Newby, L. K., Granger, C. B., Cook, W. A., Peterson, E. D., Echols, M., . . . Granger, B. B. (2010). Differences in level of care at the end of life according to race. *American Journal of Critical Care, 19*(4), 335-343. doi: 10.4037/ajcc2010161

Joshanloo, M. (2011). Investigation of the contribution of spirituality and religiousness to hedonic and eudaimonic well-being in Iranian young adults. *Journal of Happiness Studies* (12), 15. doi: 10.1007/s10902-010-9236-4

Kaldjian, L. C., Erekson, Z. D., Haberle, T. H., Curtis, A. E., Shinkunas, L. A., Cannon, K. T., & Forman-Hoffman, V. L. (2009). Code status discussions and goals of care among hospitalised adults. *Journal of Medical Ethics, 35*(6), 338-342. doi: 10.1136/jme.2008.027854

Karches, K. E., Chung, G. S., Arora, V., Meltzer, D. O., & Curlin, F. A. (2012). Religiosity, spirituality, and end-of-life planning: a single-site survey of medical inpatients. *Journal of Pain & Symptom Management, 44*(6), 843-851. doi: 10.1016/j.jpainsymman.2011.12.277

Kashdan, T. B., & Nezlek, J. B. (2012). Whether, when, and how is spirituality related to well-being? Moving beyond single occasion questionnaires to understanding daily process. *Personality & Social Psychology Bulletin, 38*(11), 1523-1535. doi: 10.1177/0146167212454549

Katz, S., Downs, T. D., Cash, H. R., & Grotz, R. C. (1970). Progress in development of the index of ADL. *Gerontologist, 10*(1), 20-30. doi: 10.1093/geront/10.1_Part_1.20

Kawa, M., Kayama, M., Maeyama, E., Iba, N., Murata, H., Imamura, Y., . . . Mizuno, M. (2003). Distress of inpatients with terminal cancer in Japanese palliative care units: from the viewpoint of spirituality. *Supportive Care in Cancer, 11*(7), 481-490. doi: 10.1007/s00520-003-0460-x

Kelley, A. S., Wenger, N. S., & Sarkisian, C. A. (2010). Opiniones: end-of-life care preferences and planning of older Latinos. *Journal of the American Geriatrics Society, 58*(6), 1109-1116. doi: 10.1111/j.1532-5415.2010.02853.x

King, M., Jones, L., Barnes, K., Low, J., Walker, C., Wilkinson, S., . . . Tookman, A. (2006). Measuring spiritual belief: development and standardization of a Beliefs and Values Scale. *Psychology Medicine, 36*(3), 417-425. doi: 10.1017/S003329170500629x

King, M., & Koenig, H. G. (2009). Conceptualising spirituality for medical research and health service provision. *BMC Health Serivices Research, 9*, 116. doi: 10.1186/1472-6963-9-116

King, M., Llewellyn, H., Leurent, B., Owen, F., Leavey, G., Tookman, A., & Jones, L. (2013). Spiritual beliefs near the end of life: a prospective cohort study of people with cancer receiving palliative care. *Psychooncology, 22*(11), 2505-2512. doi: 10.1002/pon.3313

Ko, E., Nelson-Becker, H., Park, Y., & Shin, M. (2013). End-of-life decision making in older Korean adults: Concerns, preferences, and expectations. *Educational Gerontology, 39*, 11. doi: 10.1080/03601277.2012.682947

Kociszewski, C. (2004). Spiritual care: a phenomenologic study of critical care nurses. *Heart & Lung, 33*(6), 401-411. Doi: 10.1016/j.hrtling.2004.06.004

Koenig, H. (2011). *Spirituality & health research: Methods, measurement, statistics, and resources*. West Conshohocken: Templeton Press.

Koffman, J., Morgan, M., Edmonds, P., Speck, P., & Higginson, I. J. (2008). "I know he controls cancer": the meanings of religion among Black Caribbean and White British patients with advanced cancer. *Social Science Medicine, 67*(5), 780-789. doi: 10.1016/j.socscimed.2008.05.004

Krishna L, Alsuwaigh R, Miti PT, Wei SS, Ling KH, & Manoharan D. (2014). The influence of the family in conceptions of personhood in the palliative care setting in Singapore and its influence upon decision making. *American Journal of Hospice & Palliative Medicine, 31*(6), 9. doi: 10.1177/1049909113500136

Kristeller, J. L., Rhodes, M., Cripe, L. D., & Sheets, V. (2005). Oncologist assisted spiritual intervention study (OASIS): Patient acceptability and initial evidence of effects. *International Journal of Psychiatry Medicine, 35*(4), 329-347. doi: 10.2190/8AE4-F01C-60MO-85C8

Kypriotakis, G., Francis, L. E., O'Toole, E., Towe, T. P., & Rose, J. H. (2014). Preferences for aggressive care in underserved populations with advanced-stage lung cancer: Looking beyond race and resuscitation. *Support Care Cancer, 22*(5), 1251-1259. doi: 10.1007/s00520-013-2079-x

Laakkonen, M. L., Pitkala, K. H., Strandberg, T. E., Berglind, S., & Tilvis, R. S. (2005). Older people's reasoning for resuscitation preferences and their role in the decision-making process. *Resuscitation, 65*(2), 165-171. doi: 10.1016/j.resuscitation.2004.11.016

Langman, L., & Chung, M. C. (2013). The relationship between forgiveness, spirituality, traumatic guilt and posttraumatic stress disorder (PTSD) among people with addiction. *Psychiatric Quarterly, 84*(1), 11-26. doi: 10.1007/s11126-012-9223-5

Leichtentritt, R. D., & Rettig, K. D. (2001). Values underlying end-of-life decisions: A qualitative approach. *Health & Social Work, 26*(3), 150-159.

Litwinczuk, K. M., & Groh, C. J. (2007). The relationship between spirituality, purpose in life, and well-being in HIV-positive persons. *Journal Association Nurses AIDS Care, 18*(3), 13-22. doi: 10.1016/j.jana.2007.03.004

Llewellyn-Thomas, H. A. (1995). Patients' health-care decision making: a framework for descriptive and experimental investigations. *Medical Decision Making: An International Journal of the Society for Medical Decision Making, 15*(2), 101-106. Retrieved from https://www.researchgate.net/publication/15414766_Patients'_health-care_decision_making_a_framework_for_descriptive_and_experimental_investigations

Lockenhoff, C. E., & Carstensen, L. L. (2004). Socioemotional selectivity theory, aging, and health: the increasingly delicate balance between regulating emotions and making tough choices. *Journal of Personality, 72*(6), 1395-1424. doi: 10.1111/j.1467-6494.2004.00301.x

Macrae, J. (2001). *Nursing as a spiritual practice: A contemporary applicaton of Florence Nightingale's views*. New York: Springer Pub.

Mako, C., Galek, K., & Poppito, S. R. (2006). Spiritual pain among patients with advanced cancer in palliative care. *Journal of Palliative Medicine, 9*(5), 1106-1113. doi: 10.1089/jpm.2006.9.1106

Marco, C. A., & Larkin, G. L. (2008). Cardiopulmonary resuscitation: knowledge and opinions among the U.S. general public. State of the science-fiction. *Resuscitation, 79*(3), 490-498. doi: 10.1016/j.resuscitation.2008.07.013

Maugans, T. A. (1996). The SPIRITual history. *Archives of Family Medicine, 5*(1), 11-16. doi: 10.1001/archfami.5.1.11

Mazanec, P. M., Daly, B. J., & Townsend, A. (2010). Hospice utilization and end-of-life care decision making of African Americans. *American Journal of Hospice & Palliative Care, 27*(8), 560-566. doi: 10.1177/1049909110372087

McDaniel, B., Grice, J., & Eason, E. (2010). Seeking a multi-construct model of mortality. *Journal of Moral Education, 39*(1), 11. doi: 10.1080/03057240903528626

McLaughlin, L.A. & Braun K. L. (1998). Asian and Pacific Islander Cultural Values: Considerations for Health Care Decision Making. *Health Social Work, 23*(2), 116-126. doi:10.1093/hsw/23.2.116

McGrath, P. (2003). Religiosity and the challenge of terminal illness. *Death Studies, 27*(10), 881-899. doi: 10.1080/716100343

Mead, E. L., Doorenbos, A. Z., Javid, S. H., Haozous, E. A., Alvord, L. A., Flum, D. R., & Morris, A. M. (2013). Shared decision-making for cancer care among racial and ethnic minorities: A systematic review. *American Journal of Public Health, 103*(12), e15-29. doi: 10.2105/AJPH.2013.301631

Miner-Williams, D. (2006). Putting a puzzle together: Making spirituality meaningful for nursing using an evolving theoretical framework. *Journal of Clinical Nursing, 15*(7), 811-821. doi: 10.1111/j.1365-2702.2006.01351.x

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Group, P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Annals of*

Internal Medicine, 151(4), 264-269, W264. doi: 10.7326/0003-4819-151-4-200908180-00135

Mok, E., Wong, F., & Wong, D. (2010). The meaning of spirituality and spiritual care among the Hong Kong Chinese terminally ill. *Journal of Advanced Nursing, 66*(2), 360-370. doi: 10.1111/j.1365-2648.2009.05193.x

Monod, S., Brennan, M., Rochat, E., Martin, E., Rochat, S., & Bula, C. J. (2011). Instruments measuring spirituality in clinical research: A systematic review. *Journal General Internal Med, 26*(11), 1345-1357. doi: 10.1007/s11606-011-1769-7

Morse, J. (2000).Exploring pragmatic utility: Concept analysis by critically appraising the literature. In B. L. R. a. K. A. Knafl (Ed.), *Concept Development in Nursing: Foundations, Techniques, and Applications* (pp. 333-352) Philadelphia: Saunders.

Murray, S. A., Kendall, M., Grant, E., Boyd, K., Barclay, S., & Sheikh, A. (2007). Patterns of social, psychological, and spiritual decline toward the end of life in lung cancer and heart failure. *Journal of Pain & Symptom Manage, 34*(4), 393-402. doi: 10.1016/ j.jpainsymman.2006.12.009

Mystakidou, K., Tsilika, E., Parpa, E., Hatzipli, I., Smyrnioti, M., Galanos, A., & Vlahos, L. (2008). Demographic and clinical predictors of spirituality in advanced cancer patients: A randomized control study. *Journal Clinical Nursing, 17*(13), 1779-1785. doi: 10.1111/j.1365-2702.2008.02327.x

Nakashima, M., & Canda, E. R. (2005). Positive dying and resiliency in later life: A qualitative study. *Journal of Aging Studies, 19*(1), 109-125. doi: 10.1016/j.jaging.2004.02.002

Narayanasamy, A. (2004). The puzzle of spirituality for nursing: A guide to practical assessment. *British Journal of Nursing, 13*(19), 1140-1144. doi: 10.12968/bjon.2004.13.19.16322

Nasreddine, Z. (2003). The Montreal Cognitive Assessment, Retrieved from http://www.mocatest.org/

Nasreddine, Z. S., Phillips, N. A., Bédirian, V., Charbonneau, S., Whitehead, V., Collin, I., ... Chertkow, H. (2005). The Montreal Cognitive Assessment, MoCA: A brief screening tool for mild cognitive impairment. *Journal of the American Geriatrics Society*, *53*(4), 695-699. doi: 10.1111/j.1532-5415.2005.53221.x

Newman, M. (1994). *Health as expanding consciousness* (2nd ed.). New York: National League for Nursing Press.

Nixon, A., & Narayanasamy, A. (2010). The spiritual needs of neuro-oncology patients from patients' perspective, *Journal of Clinical Nursing*, *19*, 2259–2270. doi: 10.1111/j.1365-2702.2009.03112.x

Noble, A., & Jones, C. (2010). Getting it right: oncology nurses' understanding of spirituality. *International Journal Palliative Nursing, 16*(11), 565-569. doi: 10.12968/ijpn.2010.16.11.80022

Norum, J., Risberg, T., & Solberg, E. (2000). Faith among patients with advanced cancer. A pilot study on patients offered "no more than" palliation. *Supportive Care Cancer, 8*(2), 110-114. doi: 10.1007/s005200050024

O'Brien, M. E. (1999). Sacred covenants. Exploring spirituality in nursing. *AWHONN lifelines: Association of Women's Health, Obstetric and Neonatal Nurses, 3*(2), 72, 69-71. doi: 10.1111/j.1552-6356.1999.tb01088.x

O'Brien, M. E. (2014). *Spirituality in nursing: Standing on holy ground* (5th ed.). Burlington, MA: Jones & Bartlett Learning.

Penman, J., Oliver, M., & Harrington, A. (2009). Spirituality and spiritual engagement as percieved by palliative care clients and caregivers. *Austrailian Journal of Advanced Nursing, 26*(4), 29-35. Retrieved from http://www.ajan.com.au/Vol26/26-4_Penman.pdf

Petry, J. J., & Finkel, R. (2004). Spirituality and choice of health care practitioner. *Journal Alternative & Complementary Medicine, 10*(6), 939-945. doi: 10.1089/acm.2004.10 .939

Phelps, A. C., Lauderdale, K. E., Alcorn, S., Dillinger, J., Balboni, M. T., Van Wert, M., . . . Balboni, T. A. (2012). Addressing spirituality within the care of patients at the end of life: perspectives of patients with advanced cancer, oncologists, and oncology nurses. *Journal of Clinical Oncoogyl, 30*(20), 2538-2544. doi: 10.1200/JCO.2011.40.3766

Phelps, A. C., Maciejewski, P. K., Nilsson, M., Balboni, T. A., Wright, A. A., Paulk, M. E., . . . Prigerson, H. G. (2009). Religious coping and use of intensive life-prolonging care near death in patients with advanced cancer. *JAMA: The Journal of the American Medical Association, 301*(11), 1140-1147. doi: 10.1001/jama.2009.341

Puchalski, C., Ferrell, B., Virani, R., Otis-Green, S., Baird, P., Bull, J., Sulmasy, D. (2009). Improving the quality of spiritual care as a dimension of palliative care: the report of the

Consensus Conference. *Journal of Palliative Medicine, 12*(10), 885-904. doi: 10.1089/jpm.2009.0142

Puchalski, C., & O'Donnell, E. (2005). Religious and spiritual beliefs in end of life care: How major religions view death and dying. *Techniques in Regional Anesthesia and Pain Management 9*(3), 114-121. doi: doi:10.1053/j.trap.2005.06.003

Puchalski, C., Vitillo, R., Hull, S. K., & Reller, N. (2014). Improving the spiritual dimension of whole person care: reaching national and international consensus. *Journal of Palliative Medicine, 17*(6), 642-656. doi: 10.1089/jpm.2014.9427

Quill, T. E. (2000). Perspectives on care at the close of life. Initiating end-of-life discussions with seriously ill patients: addressing the "elephant in the room". *JAMA: The Journal of the American Medical Association, 284*(19), 2502-2507. doi: 10.1001/jama.284.19.2502

Rodriguez, K. L., & Young, A. J. (2005). Perspectives of elderly veterans regarding communication with medical providers about end-of-life care. *Journal of Palliative Medicine, 8*(3), 534-544. doi: 10.1089/jpm.2005.8.534

Rodriguez, K. L., & Young, A. J. (2006). Perceptions of patients on the utility or futility of end-of-life treatment. *Journal of Medical Ethics, 32*(8), 444-449. doi: 10.1136/jme.2005.014118

Roscoe, L. A., Corsentino, E., Watkins, S., McCall, M., & Sanchez-Ramos, J. (2009). Well-being of family caregivers of persons with late-stage Huntington's disease: lessons in stress and coping. *Health Community, 24*(3), 239-248. doi: 10.1080/10410230902804133

Rubin, D., Dodd, M., Desai, N., Pollock, B., & Graham-Pole, J. (2009). Spirituality in well and ill adolescents and their parents: The use of two assessment scales. *Pediatric Nursing, 35*(1), 37-42.

Salsman, J. M., Pustejovsky, J. E., Jim, H. S. L., Munoz, A. R., Merluzzi, T.V., …Fitchett, G. (2015). A meta-analytic approach to examining the correlation between religion/spirituality and mental health in cancer. *Cancer*, 121, 3769-3778. doi: 10.1002/cncr.29350

Santonocito, C., Ristagno, G., Gullo, A., & Weil, M. H. (2013). Do-not-resuscitate order: A view throughout the world. *Journal Critical Care, 28*(1), 14-21. doi: 10.1016/j.jcrc. 2012.07.005

Selman, L., Siegert, R., Harding, R., Gysels, M., Speck, P., & Higginson, I. J. (2011). A psychometric evaluation of measures of spirituality validated in culturally diverse palliative care populations. *Journal Pain Symptom Management, 42*(4), 604-622. doi: 10.1016/j.jpainsymman.2011.01.015

Sharp, S., Carr, D., & Macdonald, C. (2012). Religion and end-of-life treatment preferences: Assessing the effects of religious denomination and beliefs. *Social Forces, 91*(1), 23. doi: 10.1093/sf/sos061

Shih, F. J., Wang, S. S., Hsiao, S. M., Tseng, P. H., & Chu, S. S. (2008). Comparison of the psychospiritual needs of Chinese heart transplant recipients at pre- and postoperative stages. *Transplant Procedure, 40*(8), 2597-2599. doi: 10.1016/j.transproceed .2008.08.032

Silvestri, G. A., Knittig, S., Zoller, J. S., & Nietert, P. J. (2003). Importance of faith on medical decisions regarding cancer care. *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology, 21*(7), 1379-1382. doi: 10.1200/JCO .2003.08.036

Singer, P. A., Martin, D. K., & Kelner, M. (1999). Quality end-of-life care: Patients' perspectives. *JAMA: The Journal of the American Medical Association, 281*(2), 163-168. doi: 10.1001/jama.281.2.163

Smith, C. S., & Hung, L. (2011). Micronesia. In M. Juergensmyer & W. C. Roof (Eds.), *Encyclopedia of global religion: Vol 2*, (p 789). Retreived from http://eblib.com

Song, M.-K., & Hanson, L. C. (2009). Relationships between Psychosocial-Spiritual Well-Being and End-of-Life Preferences and Values in African-American Dialysis Patients. *Journal of Pain and Symptom Management*, 38(3), 372–380. http://doi.org/10.1016/j.jpain symman.2008.11.007

Stanworth, R. (2006). When spiritual horizons beckon: Recognizing ultimate meaning at the end of life. *OMEGA, 53*(1-2), 10. doi: 10.2190/5BUU-BUJ6-8LT1-46NC

Stephenson, P., Draucker, C., & Martsolf, D. (2003). The expereince of spirituality in the lives of hospice patients. *Journal of Hospice and Palliative Nursing, 5*(1), 8. doi: 10.1097/00129191-200301000-00020

Sullivan, M. A., Muskin, P. R., Feldman, S. J., & Haase, E. (2004). Effects of religiosity on patients' perceptions of do-not-resuscitate status. *Psychosomatics, 45*(2), 119-128. doi: 10.1176/appi.psy.45.2.119

Sulmasy, D. P. (2002). A biopsychosocial-spiritual model for the care of patients at the end of life. *Gerontologist, 42,* Spec No 3, 24-33. Retrieved from https://pmr.uchicago.edu/sites /pmr.uchicago.edu/files/uploads/Sulmasy_ABiopsychosocial-SpiritualModelforthe CareofPatientsattheEndofLife%20.pdf

Taylor, E. J. (2003). Nurses caring for the spirit: patients with cancer and family caregiver expectations. *Oncology Nursing Forum, 30*(4), 585-590. doi: 10.1188/03.ONF.585-590

Unruh, A. M., Versnel, J., & Kerr, N. (2002). Spirituality unplugged: A review of commonalities and contentions, and a resolution. *Canadian Journal of Occupational Therapy. 69*(1), 5-19. doi: 10.1177/000841740206900101

van Leeuwen, R., Tiesinga, L. J., Jochemsen, H., & Post, D. (2007). Aspects of spirituality concerning illness. *Scandinavian Journal of Caring Science, 21*(4), 482-489. doi: 10.1111/j.1471-6712.2007.00502.x

Van Ness, P. H., Towle, V. R., O'Leary, J. R., & Fried, T. R. (2008). Religion, risk, and medical decision making at the end of life. *Journal of Aging & Health, 20*(5), 545-559. doi: 10.1177/0898264308317538

Vig, E. K., Davenport, N. A., & Pearlman, R. A. (2002). Good deaths, bad deaths, and preferences for the end of life: A qualitative study of geriatric outpatients, *Journal of the American Geriatric Society. 50*(9):1541–1548. doi: 10.1046/j.1532-5415.2002.50410.x

Volker, D. L., & Wu, H. L. (2011). Cancer patients' preferences for control at the end of life. *Qualitative Health Research, 21*(12), 1618-1631. doi: 10.1177/1049732311415287

Voogt, E., van der Heide, A., Rietjens, J. A., van Leeuwen, A. F., Visser, A. P., van der Rijt, C. C., & van der Maas, P. J. (2005). Attitudes of patients with incurable cancer toward medical treatment in the last phase of life. *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology, 23*(9), 2012-2019. doi: 10.1200/JCO.2005.07.104

Watson, J. (1985). *Nursing: Human science and human care*. Norwalk, CT: Appllleton Century Crofts.

Weeks, J. C., Cook, E. F., O'Day, S. J., Peterson, L. M., Wenger, N., Reding, D., . . . Phillips, R. S. (1998). Relationship between cancer patients' predictions of prognosis and their treatment preferences. *Journal of the American Medical Association, 279*(21), 1709-1714. doi: 10.1001/jama.279.21.1709

Williams, J. A., Meltzer, D., Arora, V., Chung, G., & Curlin, F. A. (2011). Attention to inpatients' religious and spiritual concerns: predictors and association with patient satisfaction. *Journal of General Internal Medicine, 26*(11), 1265-1271. doi: 10.1007/s11606-011-1781-y

Winter, L., Lawton, M. P., & Ruckdeschel, K. (2003). Preferences for prolonging life: A prospect theory approach. *International Journal of Aging & Human Development, 56*(2), 155-170. doi: 10.2190/NEJM199103283241304

Winzelberg, G. S., Hanson, L. C., & Tulsky, J. A. (2005). Beyond autonomy: Diversifying end-of-life decision-making approaches to serve patients and families. *Journal of the American Geriatrics Society, 53*(6), 1046-1050. doi: 10.1111/j.1532-5415.2005.53317.x

Woods, T. E., & Ironson, G. H. (1999). Religion and Spirituality in the Face of Illness: How Cancer, Cardiac, and HIV Patients Describe their Spirituality/Religiosity. *Journal of Health Psychology, 4*(3), 393-412. doi: 10.1177/135910539900400308